Year 7 – HT4

Newsome Academy
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Knowledge Organisers

Name:

Team:

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Mathematics

Our students will:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- can **solve problems** by applying their mathematics to a variety of routine and non- routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

7.16 Percentages including increase and decrease

The learning outcomes for this topic are:

- Find 10%,5%,1% without a calculator
- Find more complex percentages
- Find any percentage of an amount using a calculator
- Increase or decrease by simple percentages without a calculator
- Write multipliers for increasing or decreasing by a percentage
- Increase and decrease using percentage multiplier

Key Word	Definition
Increase	Goes up in value
Decrease	Goes down in value
Interest	Extra money the bank gives you if you save with them
Depreciate	Similar to decrease, where a value falls
Multiplier	What you are multiplying by
Compound	Referring to the interest: interest paid on the initial investment plus previous year's interest
Simple	Not complicated. Referring to interest: same amount of interest based on the initial sum

Additional Resources

MathsWatch: 86, 87, 108

Corbett Maths: Videos 234, 235, 238, 239 ; Worksheets 234, 235, 238, 239

Careers Focus – Where could this take you?

As a **mortgage advisor** I use percentages when calculating how much a mortgage will cost a potential to repay each month in order to pay back the full loan. These calculations are important to ensure the bank earns money and we don't lend people more money than they can afford to repay.

Curriculum Links - Coherence

Required Knowledge:
- KS2 percentages

Applied to:
- 9H.04 percentages of amounts

Links across school:
- Interpreting graphs of soil samples (Geography)
- Explaining finds of an experiment (Science)

Key Concepts

Percentage of an Amount

A **percentage of an amount** allows us to calculate a percentage of a given number by either calculating simple percentages such as 10% and 1% and building the percentage up from there, or by using a percentage multiplier.

E.g. Find **21%** of **£500.**

Using simple percentages

100% is the original amount.
10% = £50
1% = £5
21% of **£500 = 2 x £50 + £5**
= £105

Using percentages multipliers

$21\% = \frac{21}{100} = 0.21$

21% of £500 = 0.21 x 500
= £105

Percentage Increase

Percentage increase means **adding a given percentage of a value onto the original value.** To do this we can either calculate the given percentage of the value and then add it on to the original value or use a percentage multiplier.

E.g.
Increase £50 by 10%

Add on percentage:	Multiplier:
10% of £50 = £5 £50 + £5 = £55	£50 x 1.1 = £55

Percentage Decrease

Percentage decrease means **subtracting a given percentage of a value from the original value.** To do this we can either calculate the given percentage of the value and then subtract it from the original or use a percentage multiplier.

E.g.
Decrease £50 by 10%

Subtract percentage:	Multiplier:
10% of £50 = £5 £50 - £5 = £45	£50 x 0.9 = £45

Concept – what it is

16% of £80
Find 10% by dividing by 10.
80 ÷ 10 = 8
Find 5% by halving the answer to 10%
8 ÷ 2 = 4
Find 1% by dividing 80 by 100.
80 ÷ 100 = 0.8
Add up your results.
8 + 4 + 0.8 = 12.8

Increase £620 by 12.5%.
This is a 12.5 %increase so we add 12.5 onto 100. As a decimal this is 1.125.
620 x 1.125 = £697.50

Decrease £435 by 15%
This is a 15% reduction. So we take off 15 from 100. As a decimal this is 0.85.
£435 x 0.85 = £369.75

Non-Concept – what it isn't

Increase by 5%. It is NOT x 0.05
It Is 1.05
It is NOT 1.5
It is 1.05

Decrease by 5%
It is NOT x 0.05
It is 100 – 5% = x 0.95

Standard Examples

Calculate 7% of 340

1% = 340 ÷ 100 = 3.4 or 340 x 0.07
7% = 3.4 x 7 =
23.8

Increase 40 miles by 43%

40 x 1.43 £ 2.616

Decrease 712kg by 24%

712 x 0.76
541.12 kg

Non-Standard Examples

James bought a house. In the first year the value of the house decreased by 10%. In the second year the value of the house increased by 10%. Is the house worth more, less, or the same as what James paid for it? Explain your answer

If the house cost £100,000
1st year = £90,000
2nd year = £99,000
Overall 1% less

Increase by 120%
You want the original amount of 100% plus an extra 120% = 220%
X 2.2

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Useful Formulae and Hints

When you are dividing by 10, take care of the decimals

50% = 0.5
5% = 0.05

50% - divide by 2
25% - divide by 4
10% - divide by 10
5% - divide 10% by 2
1% - divide by 100
½% - divide 1% by 2
2% - 2 x 1%
15% - 10% = 5%
37% - 3 x 10% plus 5% plus 2 x 1%

Money: remember an answer of 16.5 should be written as £16.50 to include the pence.

Increasing an amount – add the percentage onto 100

Decreasing an amount – deduct the amount from 100.

GCSE Questions

1 Work out 10% of £95

(Total for question 1 is 1 mark)

2 Work out 50% of 1200 grams

(Total for question 2 is 1 mark)

3 Work out 1% of 200 litres

(Total for question 3 is 1 mark)

6 Find 36% of 2500

(Total for question 6 is 2 marks)

4. Calculate 3.5% of 140g

.....g
(2)

8 Which is greater

25% of 90 or 28% of 82

You must show your working.

(Total for question 8 is 3 marks)

6. Increase £2400 by 9%

8. Decrease 18000 by 6%

11. Oliver's salary is £18,000 and he is due to get an increase of 4%.
How much will this increase be?

£.....
(2)

12. A new TV is priced at £320
In a sale it is reduced by 45%

Calculate the sale price

£.....
(3)

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7.17 Percentage change

The learning outcomes for this topic are:

- Write a number as a percentage of another
- Find simple percentage profit
- Write a number as a percentage of another when in different units
- Find a simple percentage loss
- Find a decimal multiplier and use it to calculate a percentage change
- Solve catch and release percentage problems

Key Word	Definition
Profit	Extra money after all monies spent has been taken out
Loss	Monies paid out are more than monies taken
Interest	An amount the bank pays you for saving with them.
Depreciation	The value of the initial amount goes down
Change	Either an increase or a decrease
Proportion	A relationship which maintains constant ratio. Part of a whole

Additional Resources

MathsWatch: 88, 89, 109

Corbett Maths: Videos 233, 391 , ; Worksheets 233, 391

Careers Focus – Where could this take you?

As a **small business owner** I need to be aware of the percentage profit or loss I make on each transaction. I need to carefully consider my mark up and how much I sell my products for to ensure I stay profitable. My percentage profit is key to understanding whether or not I can afford the charges from third party sellers.

Curriculum Links - Coherence

Required Knowledge:
- 7.15 Fractions, decimals and percentages

Applied to:
- 9F.19 Best buys, Ratio

Links across school:
- Percentage increase/decrease in GDP (Business)

Key Concepts

Percentage Change

In order to calculate percentage change:

1. Work out how much the value has changed using subtraction
2. Apply the percentage change formula

$$\text{Percentage change} = \frac{\text{Change}}{\text{Original}} \times 100$$

This can then be worked out using a calculator.

One number as a percentage of another

To write **one number as a percentage of another**, write the number as a fraction and work out an equivalent fraction with a denominator of 100.

Alternatively we can write the fraction and multiply by 100.

E.g.

Express 20 out of 50 as a percentage → $\frac{20}{50} = \frac{40}{100} = 40\%$ OR $\frac{20}{50} \times 100 = 40\%$

Capture Recapture

Capture recapture is a sampling technique used to **estimate population size**. This has real life applications.

To do this we need to set up a **controlled investigation** where the objects (usually **animal populations**) are **captured**, **marked**, **released**, and then **recaptured** after a period of time. The proportion of the marked members in the second sample can give an estimate to the population size. To work out an estimate for the total population we use the formula:

$$\frac{M}{N} = \frac{R}{T}$$

Where:
M = Total marked R = Number of marked recaptured
N = Total population T = Total recaptured on second visit

Concept – what it is

Percentage Change:
show that change as a **percent of the old value** ... so divide by the old value and make it a percentage:
So the percentage change from 5 to 7 is:
*2/5 = 0.4 = **40%***

Step 1: Divide the New Value by the Old Value (you will get a decimal number)
Step 2: Convert that to a percentage (by multiplying by 100 and adding a "%" sign)
Step 3: Subtract 100% from that.

Non-Concept – what it isn't

Careful when you are putting the values into a fraction. The new value is the numerator. The old value is the denominator

Careful when you have multiple percentage changes. You can not add the percentages together. You need to calculate each step separately.

Standard Examples

The number of TVs sold increased from 70 to 98

Work out the percentage increase.

$\frac{28}{70} \times 100$ $\frac{4}{10} \times 100$

40 %

Peter's weight decreases from 80kg to 64kg.

Calculate the percentage decrease in Peter's weight.

$\frac{16}{80} \times 100$ $\frac{2}{10} \times 100$

20 %

Non-Standard Examples

A television costing £500 was reduced by 10% in a sale.
2 weeks later the sale price was reduced by 10%. Find the overall percentage reduction in price.
10% of £500 = £50
£500 − £50 = £450
10% of £450 = £45
£450 − £45 = £405
The old value is £500 and the new value is £405.
Change: £500 − £405 = £95
% change = $\frac{95}{500} \times 100$
% change = 19%

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The learning outcomes for this topic are:

- Write a number as a percentage of another
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- Write a number as a percentage of another when in different units
- Find a simple percentage loss
- Find a decimal multiplier and use it to calculate a percentage change
- Solve catch and release percentage problems

Useful Formulae and Hints

Careful when you are putting the values into a fraction. The new value is the numerator. The old value is the denominator

Careful when you have multiple percentage changes. You can not add the percentages together. You need to calculate each step separately.

Percentage profit/loss/change = (new – old)/old x 100

GCSE Questions

1. For every 50 students at Hightown School, 29 are girls.

(a) Work out 29 as a percentage of 50.

.....%
(2)

1000 students attend Hightown School.

(b) How many girls attend Hightown School?

.....
(2)

9. There are 600 people at a football match.
There 222 children at the match.

Write 222 out of 600 as a percentage.

.....%
(2)

1 Emma buys a house for £201 500
She sells the house for £213 590

Calculate the percentage profit Emma makes.

(Total for question 1 is 3 marks)

4 Last year Victoria paid £354 for her car insurance

This year she has to pay £329 for her car insurance.

Work out the percentage decrease in her car insurance.

Give your answer to 1 decimal place.

(Total for question 4 is 3 marks)

12 Theo buys 24 packs of crisps.
He pays £3 for the crisps.

Theo sells each pack of crisps for 50p.

Work out Theo's percentage profit.

(Total for question 12 is 3 marks)

Question 1: Hannah wants to estimate the number of eels in a lake.
She catches and rings 50 eels.
She returns the 50 eels to the lake.
The next day Hannah catches 400 eels.
Of these 400 eels, 10 are ringed.

Work out an estimate for the total number of eels in the lake.

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7.18 Ratios

The learning outcomes for this topic are:

- Simplify simple two or three part ratios
- Find equivalent ratios
- Share an amount into a two part ratio
- Share an amount in a three part ratio
- Use equivalent ratios where one person's share is given rather than total
- Use equivalent ratios where difference is given

Key Word	Definition
Ratio	How many parts each side has. E.g. Red: Blue 3:2 3 reds for every two blues
Proportion	A relationship which maintains a constant ratio. Part of a whole
Fraction	A part of a whole that has been divided into equal amounts. It describes how many parts you are talking about
Direct proportion	A relationship in which one variable increases or decreases at the same rate as another
Sharing	dividing according to a ratio
Simplify	To make a ratio easier to work with by reducing it to the lowest propotional values
Equivalent	The same as. Proportionally identical.
Difference	one subtract the other

Additional Resources

MathsWatch: 38, 106

Corbett Maths: Videos 269, 270, 271, 271a, b, and e; , ; Worksheets 269, 270, 271, 271a, b, and e;

Careers Focus – Where could this take you?

As a garden designer I use ratio is multiple areas of my work. Ratio is important when choosing how many of each type of plant to place in an area for it to be as aesthetically pleasing as possible. It is also important when mixing soils, cement and other materials for the garden.

Curriculum Links - Coherence

Required Knowledge:
- KS2 Ratio

Applied to:
- 9F.19 Direct Proportion
- 10H.05 Similar Triangles

Links across school:
- Changing recipes (Food and Nutrition)

Key Concepts

Ratio

Ratio is a **relationship between two or more quantities** showing the number of times one is contained within the other(s). Ratios are written in the form a:b, which is said "a to b".

We can use ratios in a variety of ways:

- How to work out ratios
- Simplifying ratios
- Dividing ratios
- Ratio to fraction
- Ratio scale
- Ratio problem solving

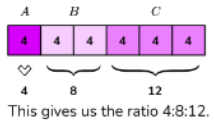
Dividing Ratios

Dividing ratios is a way of sharing a quantity in given parts of a ratio.

E.g. A bag contains 24 sweets. Three friends share the sweets in the ratio of 1:2:3. How many sweets does each person get?

If person A gets 1 share, person B gets 2 shares and person C gets 3 shares, each time the parts are shared, we are using 1+2+3=6 parts.

Each share is therefore worth 246=4.
If A gets 1 share, B gets 2 shapes and C gets 3 shares, we have



This gives us the ratio 4:8:12.

Ratio to Fractions

A ratio compares how much of one thing there is compared to another. It can be written using a ':', the word 'to' or as a fraction.

In order to convert ratios to fractions when we have the ratio a:b, where both values are parts of the total, we can say that for the ratio :

$\frac{a}{a+b}$ and $\frac{b}{a+b}$

E.g. In the diagram below is a bar model that represents the ratio of blue:red as 3:2 (3 to 2). There are 3 blue blocks, 2 red blocks which means there are 5 blocks in total.

The fraction for blue is $\frac{3}{2+3} = \frac{3}{5}$.

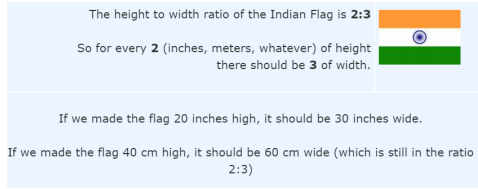
The fraction for red is $\frac{2}{2+3} = \frac{2}{5}$.

Concept – what it is

A ratio **compares values**.
A ratio says how much of one thing there is compared to another thing.

3 : 1

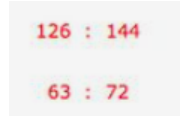
There are 3 blue squares to 1 yellow square



Non-Concept – what it isn't

It is not a fraction.
2:3 does NOT convert to $\frac{2}{3}$
Nor is it a percentage.

NB this is metres to km
So actually 50:2000



Simplify 126:144
This is not finished
It should be 7:8

Standard Examples

Simplify 25:35
Divide each side by 5.
Equals 5:7

Share £20 in a ration of 2:3

5 lines so £20 ÷ 5 = 4

4 4 = 8

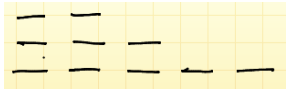
4 4 4 = 12

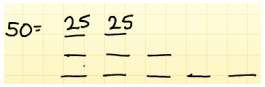
Fraction: total of 5 lines so $\frac{2}{5}$ and $\frac{3}{5}$

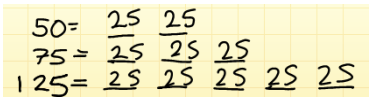
Non-Standard Examples

Three angles are in the ratio 2 : 3 : 5
The smallest angle is 50°

Work out the sizes of the other two angles







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- Use equivalent ratios where difference is given

Useful Formulae and Hints

Don't forget that ratio is written as a : b not as a fraction.

Always draw the lines in one on top of the other. Fill in what you know and then the other lines will all be the same.

Do you need to simplify to make the question easier?

Is it as simple as you can make it?

Do you need to increase the amounts to make the question work?

Remember to increase both sides the same so the proportions remain the same.

GCSE Questions

5 (a) Write the ratio 15 : 35 in its simplest form. (1)

((b) There are red shapes and blue shapes in a box, $\frac{2}{3}$ of the shapes are red

Write the ratio of red shapes to blue shapes. (1)

(Total for question 9 is 2 marks)

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1 Will and Olly share £80 in the ratio 3 : 2

Work out how much each of them get.

(3 marks)

---

2 Molly, Paige and Demi share 42 sweets in the ratio 3 : 2 : 1

Work out the number of sweets that each of them receives.

(3 marks)

---

5 Jerry and Mick share some money in the ratio 2 : 3
Mick gets £900

Work out how much money Jerry gets.

(3 marks)

---

6 Ali and Steve share some sweets in the ratio 2 : 7
Steve gets 30 more sweets than Ali.

Work out how many sweets Steve gets.

(3 marks)

---

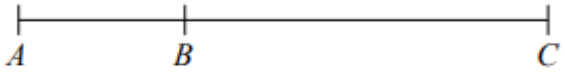
7 Dave is making cookies.
He mixes flour, butter and sugar in the ratio 6 : 4 : 1

Dave uses 160 grams of butter.
Work out how much flour and sugar Dave uses.

(3 marks)

---

3 *ABC* is a straight line.



The length of *BC* is three times the length of *AB*.

AC = 80 metres.
Work out the length *BC*.

(3 marks)

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11 Megan is going to make a drink using the instructions below.

> Mix 2 parts of fruit juice
> with 5 parts of sparkling water

Megan has 180 m*l* of fruit juice and 400 m*l* of sparkling water.

What is the greatest amount of the drink Megan can make?

(3 marks)

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7.19 Averages

The learning outcomes for this topic are:

- Find the mode from a list of data
- Find the range from a list of data
- Find the median from a list of numbers
- Find the mean from a list of data
- Compares two lists of data using the mean/median and the range
- Find a list of numbers given information about their averages

Key Word	Definition
Mean	The nasty one. Add them all up, divide by how many there are
Median	The *middle*. Oder them. If two middles add them up and divide by 2
Mode	The *most* common. The one that has the most of them
Range	Maximum – Minimum. Biggest take away the smallest. Must be ordered
Average	All the above. Usually referring to the mean.
Consistency	Steady, even, not contradicting one another
Spread	How the data are distributed.
Suitable	Something sensible

Additional Resources

MathsWatch: 62

Corbett Maths: Videos 50, 53, 56, 57, , ; Worksheets 50, 53, 56, 57,

Careers Focus – Where could this take you?

I am a scientist who works for a **government agency**. I will analyse and interpret data to gain information on a variety of different subjects and problems. I will then produce papers for ministers to read to influence policies that are made by the government.

Curriculum Links - Coherence

Required Knowledge:
- KS2 averages

Applied to:
- 8.22 Mean from Group data
- 10H.20 Cumulative Frequency Diagrams and Box

Links across school:
- Econometrics (Business)
- Interpreting statistics(Geography)

Key Concepts

Mean, Median, Mode

The **mean, median and mode** in maths are averages.

Mean:
Find the total of the values and divide the total by the number of values.

$$\text{mean} = \frac{\text{total}}{\text{number of values}}$$

Median:
Arrange the values in numerical order, from the smallest value to the highest value and find the middle value.

Mode:
Find the most frequently occurring item in the data set.

Mean, Median, Mode

In order to find the **mean, median or mode** here are some tips to consider:

1. **Mode** - consider how many times the values occur; there may be two modes (bimodal)
2. **Median** - make sure the list of values is in numerical order, and find the middle of the set
3. **Mean** - find the total and divide by the number of values

Range

The range is a measure of how spread out a set of data is.

To calculate the range we find the difference between the highest value and the lowest value.

$$\text{Range} = \text{highest value} - \text{lowest value}$$

E.g. Work out the range
5 8 10 11 13

$$\text{Range} = \text{highest value} - \text{lowest value} = 13 - 5 = 8$$

Concept – what it is

Example: 3, 13, 7, 5, 21, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29

When we put those numbers in order we have:

3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 39, 40, 56

There are **fifteen** numbers. Our middle is the **eighth** number:

3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 39, 40, 56

3, 7, 5, 13, 20, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29

In order these numbers are:

3, 5, 7, 12, 13, 14, 20, **23, 23, 23, 23**, 29, 39, 40, 56

We can now easily see which numbers appear **most often**.

In this case the mode is **23**.

Non-Concept – what it isn't

MEDIAN
It is NOT the middle of a random set of data.
It must be ordered first.
RANGE
Again, it is not the last number subtract the first number UNLESS the data are organized in order.

Standard Examples

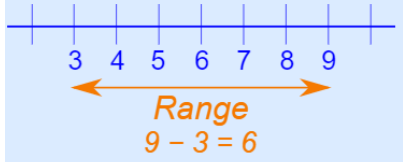
Example 1: What is the Mean of these numbers?

6, 11, 7

- Add the numbers: **6 + 11 + 7 = 24**
- Divide by *how many* numbers (there are 3 numbers): **24 / 3 = 8**

The Mean is 8

So the range is 9 – 3 = **6**.



Non-Standard Examples

There are now **fourteen** numbers and so we don't have just one middle number, we have a **pair of middle numbers**:

3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 40, 56

In this example the middle numbers are **21 and 23**.

To find the value halfway between them, add them together and divide by 2:

21 + 23 = 44
then **44 ÷ 2 = 22**

Example: {1, 3, 3, 3, 4, 4, 6, 6, 6, 9}

3 appears three times, as does 6.

So there are two modes: at **3** and **6**

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- Compares two lists of data using the mean/median and the range
- Find a list of numbers given information about their averages

Useful Formulae and Hints

Mode is the Most common.
The beginning is the same and the number of letters is the same.

Median is the Middle number. The number of letters is the same. Don't forget to ORDER them first.

Range is like the English word. The Distance between them. So the Maximum (biggest) subtract (take away) the Minimum (smallest).

The Mean is the nasty one because you have to do the most work. Add them all up and divide by the number there is. It's like spreading them all evenly.

GCSE Questions

5 Here are six cards. Each card has a number on it.

19	7	11	8	15	15

(a) Work out the range of the numbers on the cards. (1)

(b) Work out the mean of the numbers on the cards. (2)

(Total for question 5 is 3 marks)

Here is a list of numbers.

8 6 4 5 9 8

(a) Work out the median

Here are six cards.
There is a number on each card.
Two of the numbers are hidden.

4	5	?	6	3	?

The mode of the six numbers is 4
The mean of the six numbers is 5

(b) Work out the two numbers that are hidden.

(Total for question 8 is 4 marks)

1 Here is a list of 10 numbers.

2 3 4 4 4 5 6 6 7 7

(a) Work out the range. (1)

(b) Find the mode. (1)

(c) Calculate the mean. (2)

(Total for question 1 is 4 marks)

4 Here are the weights, in grams, of 6 potatoes

150 129 125 133 144 105

(a) Work out the range. (1)

(b) Work out the median weight. (2)

(Total for question 4 is 3 marks)

9 Here is a list of numbers.

14 19 15 20 11 14 19

(a) Find the range (1)

(b) Calculate the mean (2)

Andrew says,
"The median is the middle number, so the median is 20."

(c) Andrew is incorrect, explain why. (2)

(Total for question 9 is 5 marks)

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English

Our students will:

- read easily, fluently and with good understanding
- develop the habit of reading widely and often, for both pleasure and information
- acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language
- appreciate our rich and varied literary heritage
- write clearly, accurately and coherently, adapting their language and style in and for a
- range of contexts, purposes and audiences
- use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas
- are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

Year 7 Shakespeare

The aims of the sequence of learning are to ensure that all students:
- Explore a range of extracts written by William Shakespeare
- Identify the writing style and use of language in key extracts
- Explore the theme of Love and Hate in selected scenes from A Midsummer Night's Dream
- Identify key characters such as villains

Keyword	Definition
Scene	A brief moment in a play consisting of dialogue and action.
Stage Direction	An instruction in the script of a play, directing the movements of the actors, the arrangement of scenery, etc.
Soliloquy or monologue	An act of speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play.
Act	Several scenes following on from each other. Each act forms the different parts of the plot.
Exposition	The opening section where the setting is fixed in a certain place and time, the mood is set, and characters are introduced.
Protagonist	The main character in the story
Villain	The 'bad guy' in the story
Climax	The turning point, which changes the protagonist's fate.
Repetition	Repeated words or ideas
Imagery	Creating a mental picture for the reader through appealing to the senses.
Simile	Comparing one thing to another using like or as, e.g. as cold as ice
Metaphor	Describes an object or action in a way that isn't literally true, but helps explain an idea or make a comparison

Key Concepts

Form (Play)- Key Terminology 1

Scene- a brief moment in a play consisting of dialogue and action.
Act- several scenes following on from each other. Each act forms the different parts of the plot.
Stage Direction- an instruction in the script of a play, directing the movements of the actors, the arrangement of scenery, etc.
Audience- the people watching the play.
Playwright- the writer of the play
Soliloquy/monologue- an act of speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play.

Structure- Key Terminology 2

5 Act play- a drama is often divided into five parts, or acts, which some refer to as a dramatic arc
Exposition- the opening section where the setting is fixed in a particular place and time, the mood is set, and characters are introduced.
Rising Action- an exciting force or inciting event
Climax- the climax is the turning point, which changes the protagonist's fate.
Falling Action- the tension decreases and it wraps up the narrative, resolves its loose ends, and leads toward the closure.
Denoument- the ending with some sort of resolution and the tying up of loose ends.
Catastrophe- the final action that completes the unravelling of the plot in a play, especially in a tragedy. The hero meets his end.

Language- Key Terminology 3

Literary Devices:

Repetition- Repeated words or ideas
Imagery- Creating a mental picture for the reader through appealing to the senses (smell, touch, taste, see, hear).
Simile- Comparing one thing to another using like or as
Metaphor- Describes an object or action in a way that isn't literally true, but helps explain an idea or make a comparison
Connotation- What a word makes the reader feel, think or imagine.
Symbolism- the way an object is given greater meaning within the novel so it has added importance.
Motif- a recurring symbol within the novel
Personification- giving human characteristics to an inanimate object

Shakespeare's Style

Verse: Speech written in poetic form

Blank Verse: a formal poetic form where each foot of a line is stressed on the second syllable (de-DUM) and each has five feet creating IAMBIC PENTAMETRE.

Prose: A form of written speech that reflects the style of ordinary speech without a rhythmic structure.

Form/Genre

Shakespeare wrote **three types** of **plays: Comedies, tragedies and histories**
Midsummer Night's Dream is classed as one of his **Comedies**

What makes it a comedy?

Love Obstacles: Hermia's father tells her she must be with Demetrius even though she loves Lysander!
Mistaken Identities: Puck mistakes Lysander for Demetrius, and Titania mistakes Bottom for a person (eventhough he looks like a donkey)
Plot Twists: Hermia and Helena are split by jealousy. The men want to fight over someone neither of them loves.
Titania is fooled by her own kind. But it all works out in the end.
Marriage or Reunion: In the end, Helena marries Demetrius, Hermia marries Lysander and the duke marries Hippolyta.

Key Themes

Love - Though most of the conflict in the play stems from the troubles of romance, and though the play involves a numberof romantic elements, it is not truly a love story
Dreams - As the title suggests, dreams are an important theme in A Midsummer Night's Dream; they are linked to the bizarre, magical mishaps in the forest.
Jealousy: The theme of jealousy operates in both the humanand fairy realms in Midsummer Night's Dream. Jealousy playsout most obviously among the quartet of Athenian lovers, who find themselves in an increasingly tangled knot of misaligned desire.

Year 7 Shakespeare

The aims of the sequence of learning are to ensure that all students:

- Explore a range of extracts written by William Shakespeare
- Identify the writing style and use of language in key extracts
- Explore the theme of Love and Hate in selected scenes from A Midsummer Night's Dream
- Identify key characters such as villains

Retrieval Practice

Questions	Answers
Can you name any of Shakespeare's Tragedies?	Antony and Cleopatra, Coriolanus, Hamlet, Julius Caesar, King Lear, Macbeth, Othello, Romeo and Juliet, Timon of Athens and Titus Andronicus.
What is a Soliloquy?	Where a character speaks their thoughts aloud to the audience
What is a Sonnet?	A traditional love poem of 14 lines
Name 3 ways in which an actor can get into character?	Facial expressions, using their body (gesture, posture, movement) and voice – Pitch, pace, use of pause, accent, tone, idiolect
What is a Patriarchal Society?	Women were considered inferior to men. Women belonged to their fathers (or brothers if their fathers had died) and then their husbands
What is a Rhyming Couplet?	Two line of the same length that rhyme and complete one thought.
Who were Chamberlain's Men?	A theatrical company with which William Shakespeare was connected for most of his professional career as a dramatist.
What ideas might you find in a Tragedy?	• Plays with serious themes and dark endings • Death and destruction of people who meant well • Flawed heroes • Fate • Spirits/evil forces

Career Focus - Where could this take you?

I am an actor. I perform in plays, movies, or television shows. I try to bring characters to life by memorising lines and acting out scenes in front of an audience or a camera. I use my voice, body language and facial expressions to convey emotions and tell a story.
I work together with directors, writers and other actors to create performances that are entertaining and meaningful.

Challenge Activities

<u>Can you create a typical Shakespearean Villain?</u>

- What would their name be?
- How would they look?
- What would be some of their villainous qualities?

Remember that these need to fit for the time that Shakespeare was writing. Think of Religion, Supernatural, Patriarchy etc.

Topic Links

This topic links to:

- History - Jacobean Era, Tragedy
- Geography - Italy, Verona
- Drama - performance of a play, audience

Additional Resources

To further practise and develop your knowledge see:

- BBC Bitesize
- https://www.bbc.co.uk/bitesize/topics/z8642p3
- https://www.bbc.co.uk/bitesize/guides/zxqsgk7/revision/1
- https://youtu.be/OyAkpZHnDpI

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Science

Our students will:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

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Year 7 Contact Forces

The aims of the sequence of learning are to ensure that all students:

- Describe forces and how they are measured
- Draw force diagrams
- Describe how friction works
- Explain how drag slows objects down

Keyword	Definition
Force	A push, pull or twist. Measured in newtons (N).
Contact Forces	Contact forces that act on objects that are physically touching.
Friction	This occurs when two objects move past each other. Friction slows objects down.
Air Resistance	This force is also known as drag. It is the force that acts on objects as they move through the air.
Upthrust	The upward force exerted by a fluid by an object floating on it.
Newton	Unit of force, symbol N.
Non-contact Forces	Non-contact forces that act between objects without them physically touching.
Gravitational Force	The force acting on an object due to gravity.
Magnetic Force	A force exerted by a magnetic field on a magnetic material.
Electrostatic Force	The force that acts between two charged objects.
Resultant Force	The overall force acting on the object that determines the movement of the object.
Streamlining	When an object is designed to reduce the resistance of air or water.
Newton Meter	A piece of equipment that measures the forces acting on an object.

Key Concepts

Contact Forces

Contact forces are **forces** that act between two objects that are physically touching each other.
Examples of contact forces include:

- **Reaction force -** An object at rest on a surface experiences **reaction force**. For example, a book on a table
- **Tension -** An object that is being stretched experiences a **tension** force. For example, a cable holding a ceiling lamp.
- **Friction -** Two objects sliding past each other experience **friction** forces. For example, a box sliding down a slope.
- **Air resistance -** An object moving through the air experiences **air resistance**. For example, a skydiver falling through the air.

Non-contact Forces

Non-contact forces are **forces** that act between two objects that are not physically touching each other.
Examples of non-contact forces include:

- **Magnetic force**

A magnetic force is experienced by any **magnetic** material in a **magnetic field**.

- **Electrostatic force**

An **electrostatic force** is experienced by any **charged particle** in an **electric field**.

- **Gravitational force**

A gravitational force is experienced by any **mass** in a gravitational field.

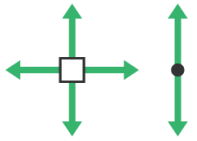
Friction and Drag (Air Resistance)

When an object is moving there are almost always forces which act against it, unless it is in a vacuum as in space. These are frictional forces and act in the opposite direction to the movement. Frictional forces make it more difficult for objects to move.

Drag is the force which acts against the movement on an object when it moves through a fluid (a liquid or gas). The faster the object moves the more drag it experiences. When the fluid is air, drag is usually described as air resistance.

Force Diagrams

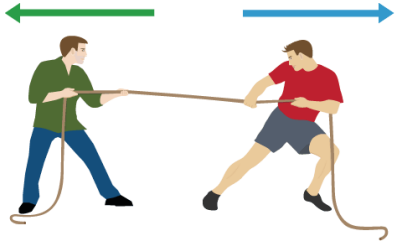
A **free body diagram** models the forces acting on an object. The object or 'body' is usually shown as a box or a dot. The forces are shown as thin arrows pointing away from the centre of the box or dot.

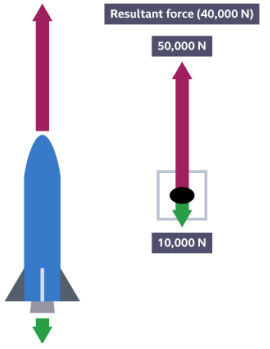


It is important to label each arrow to show the magnitude of the force it represents. The type of force involved may also be shown.

Balanced and Unbalanced Forces

Balanced forces are forces where the effect of one force is cancelled out by another. A tug of war, where each team is pulling equally on the rope, is an example of balanced forces.





If the forces acting on the object are not balanced then there is a resultant force acting on the object this means that the object is either accelerating or decelerating.
It is **unbalanced forces** that cause 'changing motion'.

Year 7 Contact Forces

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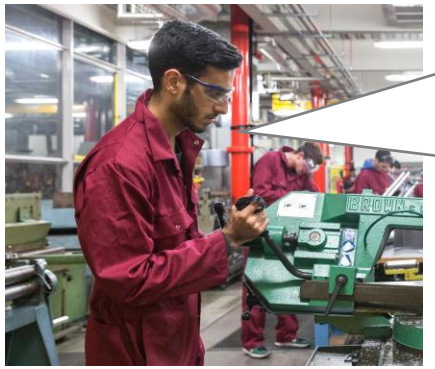
The aims of the sequence of learning are to ensure that all students:

- Describe forces and how they are measured
- Draw force diagrams
- Describe how friction works
- Explain how drag slows objects down

Retrieval Practice

Questions	Answers
What is a force?	A push, pull or a twist
What does a force do?	They can change the shape, speed or direction of an object.
How are forces represented?	Using arrows.
What are forces measured in?	Newtons (N)
Give an example of a contact force.	Tension, Friction, Upthrust, Air resistance, Thrust and Normal reaction force.
What is friction?	The force that slows an object down because it works in the opposite direction to the movement of the object.
What causes friction?	Contact between surfaces.
What is a drag force?	A resistance force caused by an object moving through a fluid (usually air or water)
How do drag forces slow objects down?	Particles from the fluid collide with the moving object providing a resisting force.
How can drag forces be reduced?	Making an object more streamlined.
What is a balanced force?	A force acting on an object in one direction that is the same size as a force acting in the opposite direction.
What happens if forces are balanced?	An object will remain stationary or will move at a constant speed.
What happens if forces are unbalanced?	The object's speed or direction changes.
How do you calculate resultant force?	Add together all the forces that are going in the same direction. The forces going in opposite directions will produce a resultant force that is calculated by taking the smaller magnitude away from the larger one.

Career Focus - Where could this take you?



I am a mechanical engineer. I work in one of the oldest branches of engineering that combines engineering physics and math to manufacture and maintain mechanical systems/machines. I could be working on anything from nanotechnology to space stations as mechanical engineers are responsible for designing and developing most things.
The skills I need to do this job include a good knowledge of science and math, an ability to come up with new ways of doing things, ability to use a computer and use my hands to repair and build machines.

Challenge Activities

1. Make flash cards to give examples of the different types of forces.
2. Create a mind map of the contact forces topic. Remember to include key words and links between information.
3. Design a vehicle to reduce the force of air resistance, draw a diagram and label its features.
4. Draw a series of force diagrams to show how the forces change when a football is stationary, accelerating and slowing down.
5. Research the scientist Robert Hooke and describe his law of elasticity.

Topic Links

This topic links to:

- Organisation
- Chemical Reactions
- Space

We will also be practising how to

- Calculate resultant force
- Describe graphs

Additional Resources

To further practise and develop you knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - https://www.bbc.co.uk/bitesize/topics/z4brd2p/articles/zs3896f
YouTube Cognito - https://www.youtube.com/watch?v=WCPTKRaScgE

Year 7 Changing Substances

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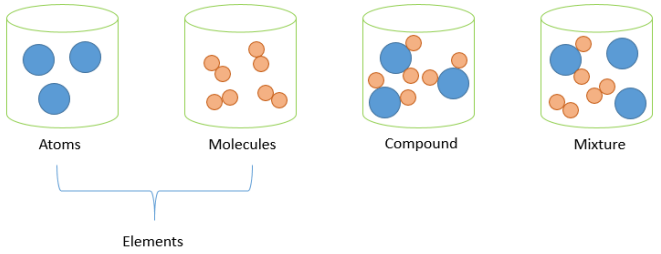
The aims of the sequence of learning are to ensure that all students:

- Describe chemical changes in terms of atoms and molecules
- Describe reactions with oxygen
- Describe acids and alkalis
- Explain neutralisation

Keyword	Definition
Physical changes	When a substance changes state. It does not make any new chemical substances forming.
Chemical changes	When a chemical reaction occurs leading to the formation of new elements or compounds.
Atom	The smallest unit of matter.
Element	A substance only made up of 1 type of atom.
Compounds	A substance made up of two or more elements chemically bonded together
Mixtures	A substance made up of two or more substances that are not chemically bonded.
Reactivity	How quickly a substance undergoes a chemical reaction.
Oxidation	When an element reacts with oxygen to form an oxide.
Acid	A sour tasting substance with a pH 1-6.
Alkali	A soapy substance with a pH 8-14.
pH scale	A scale used to indicate how acidic or alkaline a substance is.
Indicator	A substance that changes colour in the presence of a chemical i.e. acid or alkali.
Neutralisation	A reaction between an acid and an alkali to produce salt and water (neutral substance).

Key Concepts

Atoms, Molecules, Compounds and Mixtures

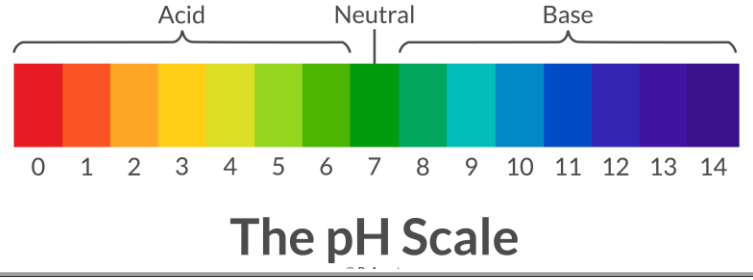


Reactions with Oxygen

In an oxidation reaction, a substance gains oxygen. Metals and non-metals can take part in oxidation reactions. Metals react with oxygen in the air to produce metal oxides.
For example when magnesium is burnt in air it reacts with oxygen to form magnesium oxide. This can be written as a word equation.

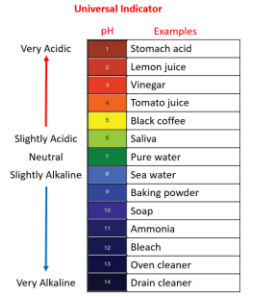
Magnesium + Oxygen → Magnesium oxide

The pH scale



Acids and Alkalis

Acids are a group of chemicals that contain a H= ion examples of which are vinegar, Hydrochloric acid and Sulphuric acid.
Alkalis are a group of chemicals that contain the OH= ion and have a soapy feel. An example is Sodium Hydroxide. In solid form they are called bases and in solution alkalis.



Neutralisation

A chemical reaction happens if you mix together an acid and a base (alkali). The reaction is called a neutralization because a neutral solution is made if you add just the right amounts.
The products are salt and water.

Salts have scientific names such as sodium chloride (table salt). The names of salts can be worked out from the acid and the alkali that react to make them.

1. The first word is the metal taken from the name of the alkali.
2. The second word ends with ide or ate and is taken from the name of the acid. Hydrochloric acid = chloride, Sulphuric acid = sulphate, Nitric acid = nitrate.

Year 7 Changing Substances

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The aims of the sequence of learning are to ensure that all students:

- Describe chemical changes in terms of atoms and molecules
- Describe reactions with oxygen
- Describe acids and alkalis
- Explain neutralisation

Retrieval Practice

Questions	Answers
What is an atom?	Tiny particles that all substances are made up of; the smallest part of an element that can exist.
What is an element?	A substance made up of only 1 type of atom
What is a compound?	Two or more different elements chemically joined together.
What is a mixture?	Two or more substances that have been mixed but not chemically joined.
What is a physical change?	When a substances change state; solid, liquid or gas (reversible)
What is a chemical change?	When substances react to form new substances (irreversible)
When metals react with oxygen, what do they produce?	Metal oxides.
How can you tell a substance is reactive?	It will bubble faster or the temperature/colour change will happen quickly.
What is the difference between a dilute or concentrated solution?	A dilute solution has more water added so it is weaker. Vice versa.
What is an indicator?	A substance that changes colour in the presence of a chemical i.e. acid or alkali.
What colour/number is a strong acid on the pH scale?	Red-Orange, pH 1-3
What colour/number is a strong alkali on the pH scale?	Purple, pH 12-14
What colour/number is neutral on the pH scale?	Green, pH 7
What is a neutralisation reaction?	The reaction between an acid and an alkali to produce a neutral solution. They produce water and a salt.

Career Focus - Where could this take you?

I am an environmental chemist so I need to understand the fate and behaviour of chemicals in the environment. I have to evaluate their effects (hazards) and risks to human health and other organisms in the environment.
My work is done through desk-based research, fieldwork and/or laboratory work, including measurements, data interpretation and computer modelling. Environmental chemists may be exposed to contaminants and hazardous conditions in the course of their work and wear appropriate personal protective equipment.

Challenge Activities

1. Produce a poster to show the pH scale: acids and alkalis, with examples of substances for each pH.
2. Produce flash cards to describe the key terms: reversible, irreversible, chemical change and physical change.
3. Make a model of atoms, elements, compounds and mixtures.
4. Antacid tablets are taken to relieve indigestion, the tablets contain alkalis such as calcium hydroxide.
5. Describe how you think antacid tablets may work.

Topic Links

This topic links to:

- States of matter
- Chemical Reactions
- Energy

We will also be practising how to

- Carry out practical work safely using the scientific method
- Calculate the rate of a reaction

Additional Resources

To further practise and develop your knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - https://www.bbc.co.uk/bitesize/topics/zypsgk7
YouTube Cognito - https://www.youtube.com/watch?v=vt8fB3MFzLk

Year 7 Interdependence

Newsome Academy
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The aims of the sequence of learning are to ensure that all students:

- Describe habitats and food chains
- Explain how organisms are adapted to their environments
- Explain how energy is transferred in ecosystems

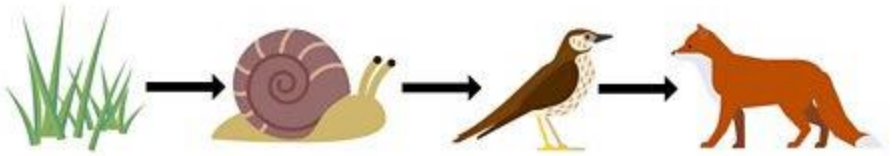
Keyword	Definition
Habitat	A home environment for plants and animals or other organisms.
Environment	The surroundings or conditions in which a person, animal, or plant lives.
Food chain	Part of a food web, starting with a producer, ending with a top predator
Food web	Shows how food chains in an ecosystem are linked.
Adaptation	Features of living organisms that help them survive.
Population	Group of the same species living in an area.
Producer	Green plant or algae that makes its own food using sunlight.
Consumer	Animal that eats other animals or plants.
Decomposer	Organism that breaks down dead plant/animal material so nutrients can be recycled back to the soil/ water.
Pyramid of numbers	The number of organisms in each trophic level is counted and presented in a pyramid of numbers.
Pyramids of biomass	The mass - in grams or kilograms - of the population of the trophic levels in a food chain.
Biodiversity	A measure of how many different species live in an ecosystem.
Ecosystem	The living things in a given area and their non-living environment.

Key Concepts

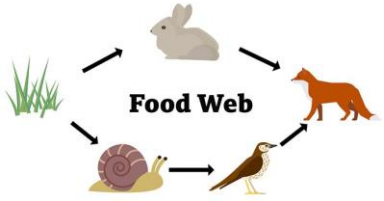
Habitats

Food chains/Webs

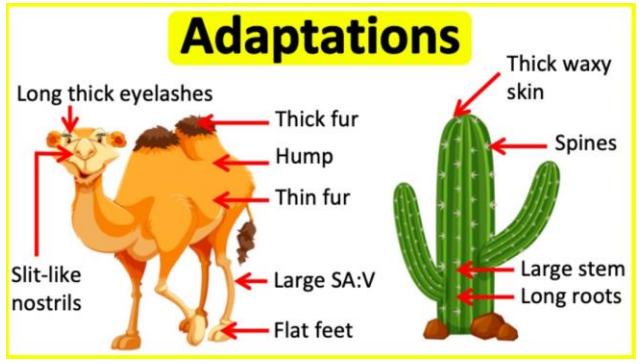
The flow of energy from one living thing to another is shown in the arrows in a **food chain**.



Plants are at the beginning of most food chains. They are called **producers** because they make their own food.
Any animal which eats a producer is called a **primary consumer**. All primary consumers are **herbivores** because they only eat plants.
Secondary consumers eat primary consumers. All secondary consumers are **predators** because they kill and eat other animals.

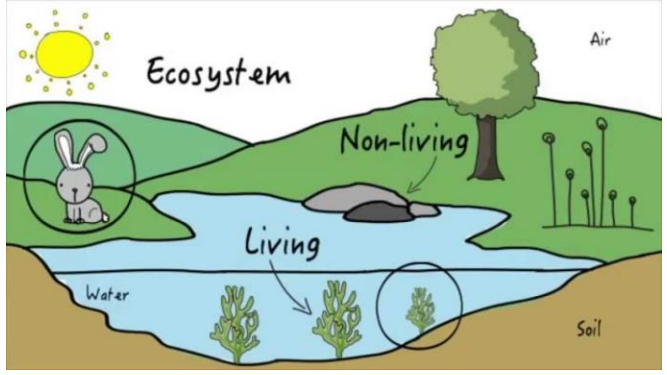


Adaptations



Ecosystems

An ecosystem is a geographic area where plants, animals, and other organisms, as well as weather and landscape, work together to form a bubble of life. Ecosystems contain biotic or living, parts, as well as abiotic factors, or nonliving parts. Biotic factors include plants, animals, and other organisms,



Year 7 Changing Substances

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The aims of the sequence of learning are to ensure that all students:

- Describe chemical changes in terms of atoms and molecules
- Describe reactions with oxygen
- Describe acids and alkalis
- Explain neutralisation

Retrieval Practice

Questions	Answers
What is a habitat?	A place that organisms live.
What is an abiotic factor?	Non-living factors such as temperature, rainfall, terrain etc.
What is a biotic factor?	Living factors such as different species and diseases.
Describe the adaptations of a polar bear.	White fur, large paws, thick fur, sharp teeth.
What do arrows in a food chain represent?	Energy being transferred.
Which direction do arrows point in a food chain?	In the direction of the consumer.
What do all food chains start with?	A producer
What is interdependence?	Organisms that rely on each other for survival in an ecosystem.
What is an endangered species?	A group of organisms that are at risk of becoming extinct due to low levels.
What does extinction mean?	The species no longer exists.
What factors increase biodiversity?	A substance that changes colour in the presence of a chemical i.e. acid or alkali.
What factors decrease biodiversity?	Loss of habitats due to farming/building, pollution and hunting animals.
What causes global warming?	Burning fossil fuels, deforestation, landfill waste.
How does global warming lead to loss of habitats?	Increasing land/ocean temperature, rising sea levels, climate change (droughts etc)
How can population sizes be measured?	Using sampling methods such as quadrats and transects.

Career Focus - Where could this take you?

I am a bee keeper. Beekeeping is much more than just collecting honey. Bees can be used for crop pollination, wax production or collecting pollen. I raise and care for bees using a variety of skills such as wood work, honey extraction, disease and parasite control and queen rearing.
I have to use my skills and knowledge about the fascinating cycles and interactions that occur in a colony of bees to maintain the health of their lives.
The wage is variable but with more experience and science qualifications you can move into commercial production or research.

Challenge Activities

1. Make flashcards for the definitions and retrieval practice questions.
2. Choose an organism to research and produce an information leaflet on the organism and the habitat it is found in.
3. Create a new organism and produce a model of its habitat.
4. Identify a habitat and draw some food chains and a food web for that habitat.
5. Research the role of a beekeeper and the importance of bee's.

Topic Links

This topic links to:

- Organisation
- Energy transfers
- Climate change

We will also be practising how to

- Draw pyramids of biomass
- Calculate energy transfers in a food chain
- Construct a scientific report

Additional Resources

To further practise and develop your knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - Ecosystems and habitats - KS3 Biology - BBC Bitesize
YouTube Cognito - https://www.youtube.com/watch?v=XVD5izWXmKo

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Humanities

Our students will:

- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people's lives have shaped this nation and how Britain has influenced and been influenced by the wider world
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time

Year 7 Maps and Mapping

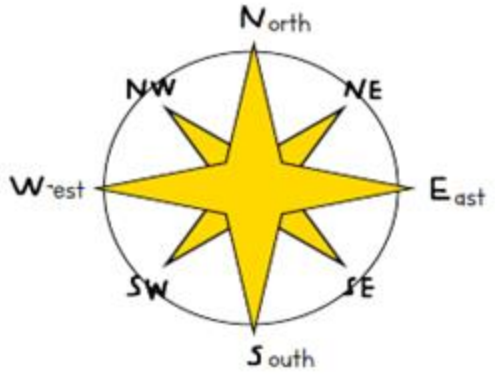
The aims of the sequence of learning are to ensure that all students:

- Accurately use an 8- and 16-point compass
- Use four and six-figure grid references, to locate places on maps
- Measure distances on a map, and use the scale to work out actual distances
- Interpret contour lines and their patterns, and spot heights on maps
- Accurately use a world map to locate places using lines of longitude and latitude

Keyword	Definition
Aerial Photo	Taking of photographs from an aircraft or other airborne platform
Contour lines	A line drawn on a map to indicate ground elevation
Degrees	To measure longitude and latitude.
Grid Reference	Used to locate a particular square/ location on a map
Latitude	Lines which run parallel to the equator and measure the distance north or south of the equator
Longitude	Lines of longitude run in a north to south direction to locate places
Minutes	Degrees of longitude and latitude are divided into minutes (60 minutes in 1 degree)
Prime Meridian	The line of 0° longitude, starting point for measuring distance both east and west around Earth
Scale	The relationship between distance on a map and the corresponding distance on the ground
Spot Heights	An exact point on a map with its height
Topography	The features and forms of land surfaces

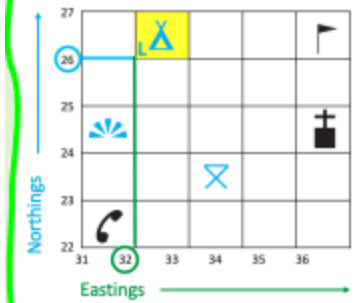
Key Concepts

COMPASS POINTS



4 FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.



The first two numbers give the eastings.

32 26

The second two numbers give the northings.

Remember... eastings then northings!

Along the corridor and up the stairs!

6 FIGURE GRID REFERENCES

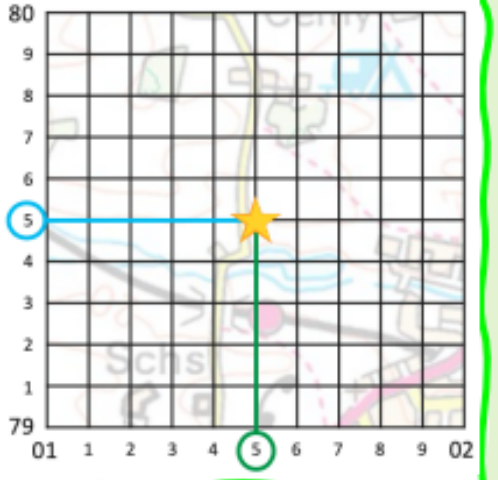
We can use six-figure grid references to find an exact location within a grid square, so they are much more accurate The grid square is divided into tenths.

Example:

015 795

The first three numbers give the easting which includes the number of tenths.

The last three numbers give the northing which includes the number of tenths.



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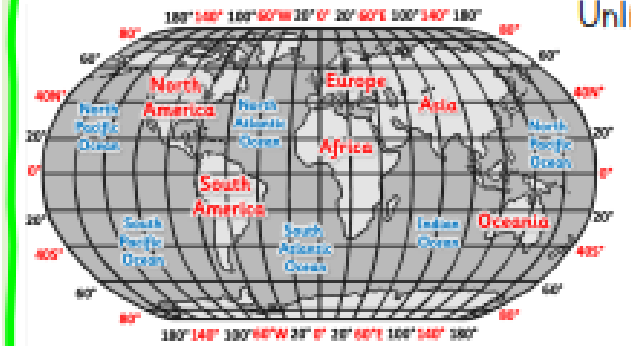
Key Concepts

MAP SYMBOLS

Symbols are useful for lots of reasons including, space saving on a map, multi-lingual (all languages can understand them), saves time, clear.

LONGITUDE AND LATITUDE



Unlike grid lines where we go along the corridor and the stairs, here we go **UP** and **ACROSS**

LATITUDE

Flat lines. Flat-itude!

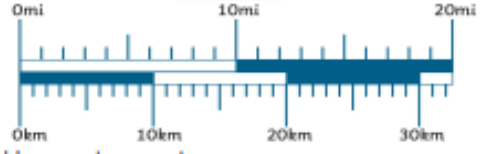
LONGITUDE

Long lines – up and down

SCALE AND DISTANCE

OS maps have a scale. On some smaller maps, 1cm on the map equals 250m in real life. On some larger maps, 1cm on the map equals 500m. Different maps might have different scales, so check on your map to find its scale.

LINE SCALE



Using a line scale on a map is as easy as using a ruler. The important thing to remember is that a line scale shows measurements in km and the measurements on a ruler are in cm.

WORD SCALE

One centimeter on the map represents 3 kilometers on the ground. (1cm = 3 km)

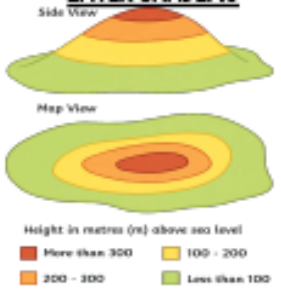
Using the scale above, if we measure the distance on a map between two places with our ruler. The measurement is 4cm. We then have to multiply that measurement by 3 to calculate that the real distance between the two places is 12km.

HEIGHT AND RELIEF

RELIEF the difference between the highest and lowest heights of an area.

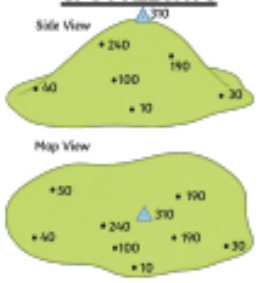
TOPOGRAPHY the surface features of the earth like hills, mountains, valleys etc.

LAYER SHADING



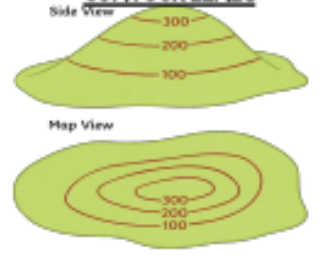
Areas of different heights are shown using different colours. A key is used to show how high the land is.

SPOT HEIGHTS



The exact height of a place above the ground is measured and written onto a map.

CONTOUR LINES



Contour lines are lines on a map which join up places of the same height. Everywhere along a contour line is the same height.

Year 7 Maps and Mapping

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Retrieval Practice

Questions	Answers
Which compass point is opposite South West?	North East
Which compass point is opposite North West?	South East
What are Northings?	Numbers on a map which go from the bottom to the top
What are Eastings?	Numbers on a map which go from left to right
What is meant by the term topography?	The surface features of the earth like hills and valleys
What are the lines on a world map referred to as?	Lines of longitude and latitude
What do contour lines close to each other show?	A steep slope
What are the map symbols for a bus station and parking?	 and 
What does a 6-figure grid reference show?	The exact location of a point within a grid square. They are more accurate

Career Focus - Cartographer

As a cartographer I design digital or paper-based maps, I check maps and charts are accurate and to scale. I also edit maps by adding or removing new roads, structures or landmarks. I also collect and analyse data from remote sensors on satellites and planes

Challenge Activities

- Create a contour model of a hill, using cardboard - try to give your hill different types of slope and relief
- Design your own map symbols and then create a map of your local area and add your symbols to show the features of the area where you live
- Write a set of detailed instructions you could provide to a friend to get them from school to your house, or from one location to another of your choice

Topic Links

This topic links to:

- Maths
- Science

Additional Resources

To further practise and develop your know ledge see:

Map symbols, direction & relief di

Grid references &

Year 7: The Norman Conquest

Newsome Academy
Everyone Exceptional Everyday

The aims of the sequence of learning are to ensure that all students:

- Explore the claimants to the English throne in 1066.
- Establish why the Battle of Stamford Bridge might be of benefit to William Duke of Normandy
- Explain why William won the Battle of Hastings in 1066 using evidence of 'preparation', 'leadership' and 'luck' to support.
- Evaluate William's methods of control in England, including: Fear, The Feudal System and Castles.

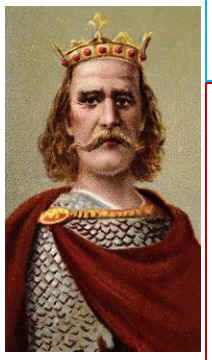
Keyword	Definition
Anglo-Saxon	A group of people from Germany and Denmark who settled in England in the 5th Century. They ruled until 1066.
Claimant	A person who claims they have a right to the throne.
Normans	A group of people from Normandy in France. They invaded England in 1066.
Fyrd	Men who fight in an Anglo-Saxon army to protect the King.
Housecarls	A group of elite soldiers in the Anglo-Saxon army.
Shield Wall	A military formation whereby all the shields interlock and form a strong barrier.
Feigned Retreat	Where the soldiers in an army pretend to retreat in order to break the formation of the opposing side.
Archers	Soldiers with a bow and arrow.
Feudal system	A Norman system which gave people land and protection by those of a higher rank, and worked and fought for them in return.
Villeins	A Villein is a class of peasant who was tied to the land that was owned by their master. Their main role was farming.
Domesday book	Created in 1086, it was a record of what each person in England owned, in terms of land and wealth.
Taxes	A compulsory contribution to the King, Queen or government. Usually based on a persons wealth and income.
Consolidate	To make something stronger or more solid.
Motte and Bailey Castle	A type of castle which has a motte (small mound of earth) and a bailey (open area / village) inside an outer wall.
Palisade	A protective fence that surrounds the Bailey and the Keep in a Motte and Bailey Castle.

Key Concepts

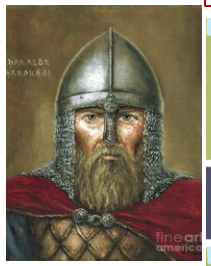
Life in Anglo Saxon England- The Anglo-Saxon period lasted from the year 410AD, when Historians think the Romans left England, until 1066 when the Normans invaded. Most people in Anglo-Saxon England lived in villages. Their homes were made of wood, wattle and daub, and thatched roofs. Most Anglo-Saxons were farmers and lived off the land.

Claimants to the Throne
Edward the Confessor died on the 5th of January 1066, leaving no Heir to the English throne. There were three men who claimed they should be the next King…

Harold Godwinson, Earl of Wessex:
Edward's brother-in-law, England's leading nobleman and The Witan's first choice. He was crowned on the 6th January the day after Edward died.



Harald Hardrada:
King of Norway, he claimed Harthacnut, King of England in 1042, promised the crown to his family. He was supported by Harold's brother, Tostig. Harold defeated Hardrada and Tostig at the Battle of Stamford Bridge on 25th September 1066.



William, Duke of Normandy:
Claim: Edward had promised him the crown. In 1063 Edward gave William, who was a great friend, and whom he had already named heir in 1051, a more serious pledge. He sent Harold to William to confirm his promise by oath. However, Harold said that the oath had been made under pressure and feared he would have been kept prisoner if he had not taken the oath.

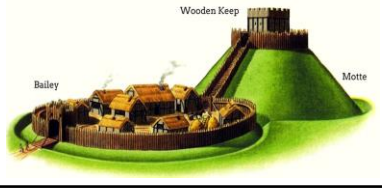
The Battle of Stamford Bridge: In two days, King Harold assembled an army of 15,000 men, which included roughly 3,000 of his elite troops - the Housecarls. King Harold led his army, most of whom were on foot, across 185 miles in just four days. The English army marched with such speed that they surprised Hardrada's Army and won a decisive victory.

The Battle of Hastings: Having delayed his invasion due to the weather, William finally set sail for England. When they reached Sussex on the 28th of September, Harold was forced to march his already exhausted army back down south to defend England against its second invasion. William of Normandy emerged victorious from the Battle of Hastings and became King of England - William the Conqueror.

The feudal system

The Harrying of the North:
There was opposition to William's rule, especially in the North of England. In order to prevent any challenge to his crown, William used terror to stop people from revolting. In 1069 his forces carried out the Harrying of the North which saw villages burned and caused the death of 100,000 people from starvation.

Motte and Bailey castles: In order to ensure that people across England were loyal to him, William built castles across the country to act as fortresses. These castles intimidated Anglo-Saxon opponents and helped William keep power.



Year 7: The Norman Conquest

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- Explain why William won the Battle of Hastings in 1066 using evidence of 'preparation', 'leadership' and 'luck' to support.
- Evaluate William's methods of control in England, including: Fear, The Feudal System and Castles.

Retrieval Practice

Questions	Answers
Describe two features of life in Anglo Saxon England:	Most people were farmers, and lived in wooden huts. Children generally didn't go to school. They made lots of things from wood, e.g. boats, and they made beautiful items of jewellery.
Who was the King who died in 1066?	Edward the Confessor.
Name two claimants to the throne in 1066:	Harold Godwinson, Harold Hardrada and William Duke of Normandy.
Describe one feature of the battle of Stamford Bridge:	It was King Harold Godwinson vs Harald Hardrada. King Harold marched his army 185 miles in 4 days to reach Stamford Bridge. King Harold had surprised Hardrada's army which gave him an advantage.
Why was the weather lucky for William Duke of Normandy?	The wind meant that William could not sail to England on the day he intended, delaying his invasion. In this time King Harold marched his army north to beat Hardrada, meaning King Harold's army were weakened in the Battle of Hastings
Name one of Williams tactics that enabled him to win the Battle of Hastings:	The Feigned Retreat. He had a 2000 - 3000 strong cavalry force. William had waited for Harold's army to come to him, making them even more exhausted. William bravely rode in front of his army in the battle to prove he was still alive, preventing panic amongst his soldiers.
Describe the events of the Harrying of the North:	The Harrying of the North refers to the brutal slaughter and pillaging of villages in Northumbria in 1069-1070 by the army of William the Conqueror. It is thought that 100,000 people starved to death.
Name two ways that William consolidated his power over England:	The Domesday book. The Feudal System. Terror. Castles
Why did William choose to build Motte and Bailey castles?	They could be built quickly and were less expensive than other castles, mainly because they were made partly from wood. They were also secure.
How did Castles help William keep control of England?	The Normans used these large fortresses to impose their authority over a whole country.

Career Focus - Where could this take you?

I am an Architect: My job is to design new buildings and help improve old ones. I have to ensure I use the correct materials and consider what will make a building strong as well as attractive on the eye. I have a wide knowledge of Architecture throughout history and spend time researching the heritage of the buildings that I work on. Architecture is influenced by society and culture and my study of history enables me to understand this connection.

Challenge Activities

1. Create a model of a Motte and Bailey castle using materials you can find at home! E.g. wooden lollypop sticks, cardboard and newspaper. You could also bake a cake to look like a castle or draw / paint a castle then label it.
2. Research a Norman castle in England that is still standing today. Then write a newspaper report detailing all you have found. You should include:
   - When was it built?
   - Why was it built?
   - Who has lived there?
   - What it is used for now.
   - Pictures of it (and maps too, if available).
   - Any other interesting or important facts or history about your chosen castle.

Topic Links

This topic links to other humanities topics such as:

- The Romans
- Medieval Life
- Christianity

Additional Resources

To further practise and develop your knowledge see:
https://www.bbc.co.uk/teach/class-clips-video/history-ks3-ks4-1066/zm3m382

https://www.bbc.co.uk/bitesize/topics/zshtyrd

https://www.essentially-england.com/norman-castles-a-to-z.html

Year 7 Ethics - Justice

The aims of the sequence of learning are to ensure that all students can:

- Explain what is Justice
- Identify the difference between Absolute & Relative poverty
- Identify key people who have fought for justice
- Research a key person who has fought for justice
- Identify the link between poverty in injustice
- Identify two charities, Christian Aid & Muslim Aid and how they help individuals around the world

Keyword	Definition
Justice	The quality of being fair and reasonable
Absolute Poverty	This is when household income is below a certain level. This makes it impossible for the person or family to meet basic needs of life including food, shelter, safe drinking water, education and healthcare.
Relative Poverty	This is when households receive 50% less than any average household. So, they do have some money but still not enough money to afford anything above the basics.
Injustice	A lack of fairness and justice
Fairtrade	Fairtrade aims to ensure a set of standards are met in the production and supply of a product or ingredient. Fairtrade means workers' rights, safer working conditions and fair pay.
Social Justice	Everyone deserves an equal chance and opportunity.
Ahimsa	Hindu and Buddhist belief to respect all living things and a belief in non-violence.
Equality	Everyone is treated equally regardless of who they are.

Key Concepts

Justice in the UK means that everyone should be treated fairly and equally under the law, regardless of their background or circumstances. It is the responsibility of the government to ensure that the legal system is fair and impartial, and that everyone has access to justice. This means that if someone breaks the law, they will be held accountable and punished appropriately. It also means that people have the right to defend themselves and to have a fair trial.

"Access to justice is a fundamental human right."

Absolute poverty Absolute poverty is when a person or family doesn't have enough money to afford the basic things they need to survive, like food, clean water, shelter, and clothing. It means they are living in very difficult and sometimes dangerous conditions, and they may not have access to things like healthcare or education. This kind of poverty can be very hard to escape from, and it affects millions of people around the world. The standards set for absolute poverty are the same across countries.

When it was established in 1990, the World Bank set the global absolute poverty line as living on less than $1 a day.

Relative poverty is a situation where someone's income or living conditions are not as good as other people in their society. For example, a family may have a home and enough food to eat, but they might not be able to afford some things that most other people in their community can, like the internet, new clothes, transport fares. This can make them feel left out or different from their peers, and it can make it hard for them to participate in some activities or events or even find a job. Relative poverty is about not having the same things as the people around you, even if you have enough to get by. Relative poverty is considered the easiest way to measure the level of poverty in an individual country but it changes from country to country.

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Key Concepts

Mohandas Gandhi believed in nonviolent resistance, which means he promoted peaceful ways of protesting against unfair treatment. He led peaceful protests, boycotts, and strikes to challenge British rule and fight for Indian independence such as the Salt March.
He also advocated for the rights of the poor and the untouchables, who were considered to be of a lower caste in Indian society.
Gandhi is known for his philosophy of "satyagraha," which means "truth-force" or "soul-force."
He believed in the power of truth and love to overcome injustice, and he worked to inspire people to act with compassion and kindness towards others.

Dr. Martin Luther King Jr. was a leader in the Civil Rights Movement in the United States during the 1950s-60s. He believed in nonviolent protest, which means that people could peacefully speak out against injustices, discrimination, and segregation.
Dr. King was a powerful speaker, and he used his words to inspire people to work together to bring about change. He organised protests and boycotts to draw attention to the unequal treatment of Black people in America. He helped to push for new laws that protected people's civil rights.
He was awarded the Nobel Peace Prize for his work in promoting peace and justice.

Mother Teresa was a Catholic nun who dedicated her life to helping the poor and sick in India. She spent many years teaching in India before starting her own order, the Missionaries of Charity, in 1950. They provided food, shelter, and medical care to the poorest and most vulnerable members of society, including the sick, dying, and disabled.
Mother Teresa is remembered for her compassion and selflessness. She believed that everyone, regardless of their background or circumstances, deserved love and respect. She was awarded the Nobel Peace Prize in 1979 for her humanitarian work.

Malala Yousafzai is a Pakistani activist and the youngest person to ever win the Nobel Peace Prize. She was born in 1997 in Pakistan and grew up in a region where the Taliban, a militant group, had banned girls from attending school.
When Malala was11 years old, she began speaking out publicly against the Taliban's rule and advocating for girls' right to education. She wrote a blog about it, which brought international attention to the situation.
However, this also made her a target for the Taliban.
In 2012, Malala was shot by a Taliban gunman while on her way to school. She survived the attack and continued her advocacy for girls' education from the United Kingdom.

Christian Aid is a charity that works to help people who are living in poverty around the world. They work with communities in some of the poorest countries in the world to provide support and assistance. They help to fund programs that provide food and clean water, build schools and clinics, and provide emergency aid in times of crisis, such as natural disasters or conflict.
One of the things that sets Christian Aid apart is that they help communities find long-term solutions to poverty. This means that they work with people to identify the root causes of poverty and help them find sustainable ways to improve their lives. It is inspired by Christian values of compassion, justice, and equality, and they work to make the world a better place by helping those in need.

Muslim Aid is a charity that works to help people in need around the world. They are inspired by Islamic values of compassion, generosity, and service to others.
Muslim Aid provides assistance in a variety of ways, including emergency relief, education, healthcare, and development projects. They work in some of the poorest and most vulnerable communities in the world, including those affected by natural disasters, conflict, and poverty.
They work with local communities to provide assistance. They believe that this helps to ensure that their work is effective, sustainable, and respectful of local culture and customs.
Muslim Aid is dedicated to helping people regardless of their race, religion, or background. They believe that all people have the right to live with dignity and respect.

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Retrieval Practice

Questions	Answers
What does Justice mean?	Justice means the quality of being just. Justice helps us to figure out what is fair, what is right and wrong.
Define the term relative poverty.	Relative poverty is when someone has some necessities to live life. less than any average household. So, they do have some money but still not enough money to afford anything above the basics.
What does absolute poverty mean?	Absolute poverty means when someone cannot afford/ meet the basic needs of life including food, shelter, safe drinking water, education and healthcare.
What does UN stand for?	UN is short for United Nations.
What is Gandhi famous for?	Non-violence protests.
What did Martin Luther King Jr. stand up for and why?	Martin Luther King Jr stood up for the rights of black people.
Who was Mother Teresa?	Mother Teresa was a Catholic nun and missionary. She is famous for helping the poor, hungry and sick people of India.
What is fairtrade?	Fairtrade aims to ensure a set of standards are met in the production and supply of a product or ingredient. Fairtrade means workers' rights, safer working conditions and fair pay.

Career Focus - Where could this take you?

I volunteer for a charity, I might help out in many different ways. I could help at a food bank by sorting and packing food for people who need it, or I could help at a homeless shelter by serving meals and talking to people who are staying there. Sometimes, I might help raise money for the charity by organising a fundraising event or doing a sponsored run.

Challenge Activities

- Write down three points that suggest someone is in absolute poverty. Explain the points in detail
- Create a poster on your own charity. How can the charity help someone and explain the key beliefs/values of the charity (who is it aimed at)
- Research one historical figure from the knowledge organiser. Create a fact file on the chosen individual or group.

Topic Links

This topic links to other RE topics and cross curricular subjects such as

- Key people
- Sikhism/Islam/Christianity
- History
- Business

We will also be practising how to

- Argue a point and practise our Voice 21
- Participate in debates
- Write PEE sentences/how to answer exam questions

Additional Resources

To further practise and develop your knowledge see:

https://www.bbc.co.uk/bitesize/guides/zdrxbdm/revision/11

https://www.nspcc.org.uk/

https://www.christianaid.org.uk/

https://islamicaid.com/

Newsome Academy
Everyone Exceptional Everyday

MFL

Our students will:

- understand and respond to spoken and written language from a variety of authentic sources
- speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- discover and develop an appreciation of a range of writing in the language studied.

Year 7 Mon Temps Libre

The aims of the sequence of learning are to ensure that all students can:

- say what sports people play
- say what activities people do.
- talk about the weather
- ask and answer simple questions.
- use more complex structures with time phrases.

Keywords/ phrases

Qu'est-ce que tu aimes faire *What do you like doing*	le week-end? *at the weekend?* avec tes amis? *with your friends?* quand il pleut? *when it rains?* sur ton portable? *on your phone?*

J'adore 😍	bloguer *blogging*
J'aime 😀	écouter de la musique *listening to music*
Je n'aime pas 😟	envoyer des SMS *sending texts*
Je déteste 😠	partager des photos *sharing photos*
	partager des vidéos *sharing videos*
	prendre des selfies *taking selfies*
	regarder des films *watching films*
	tchatter *chatting (online)*

Key Concepts

Tu fais du sport? Do you do sport?

Je fais	**I do**	**Nous faisons**	**We do**
Tu fais	**You do**	**Vous faites**	**You do**
Il/ elle/on fait	**He/ she does/we do**	**Ils/ elles font.**	**They do**

du skate **du** patin à glace **du** théâtre **du** vélo **du** ski **du** judo	**de la** cuisine **de la** danse **de la** gymnastique **de la** natation
de l'athlétisme **de l'**équitation	**des** randonnées

Tu est sportif / sportive? - Are you sporty?

Je joue	**I play**	**Nous jouons**	**We play**
Tu joues	**You play**	**Vous jouez**	**You play**
Il/ elle/on joue	**He/ she/ we play**	**Ils/ elles jouent**	**They play**

au basket / billard - basketball / snooker
au football (foot) / rugby - football / rugby
au hockey / tennis - hockey - hockey / tennis
au handball - handball
à la pétanque/aux boules - boules
aux cartes - cards
aux échecs - chess

Talking about the weather

il fait beau
the weather's fine
il fait mauvais
the weather's bad
il fait chaud - it is hot
il fait froid - it is cold

il y a du soleil - it is sunny
il y a du vent - it is windy
il pleut - it is raining
il neige - it is snowing

Key sounds

ai	tion
vrai ✓	maison 
	natation 
	équitation 

Year 7 Mon Temps Libre

The aims of the sequence of learning are to ensure that all students can:

- say what sports people play
- say what activities people do.
- talk about the weather
- ask and answer simple questions.
- use more complex structures with time phrases.

Retrieval Practice

Questions	Answers
Quel temps fait-il?	Aujourd'hui **il fait beau.**
Tu es sportif? Tu es sportive?	**Oui –** je joue **au golf** et le weekend je joue **au foot.**
Qu'est-ce que tu fais le weekend?	Je fais **de la danse** et je fais aussi **de la natation.**
Quand est-ce que tu fais **du cyclisme?**	Je fais **du cyclisme tous les weekends.**
Qu'est-ce que tu aimes faire?	J'aime **prendre les selfies** et **partager les photos.**
Qu'est-ce que tu n'aimes pas faire?	Je n' aime pas **regarder les films** et **bloguer.**
Pourquoi?	Je pense que c'est **chouette** 😍 **nul** 😟
Est-ce que tu aimes **écouter de la musique?**	Oui j'adore **écouter de la musique. C'est formidable.**
Qu'est-ce que tu fais **quand il pleut?**	**Quand il pleut je joue aux cartes.**

Career Focus - Where could this take you?

I am a games designer. I am lucky because I can work all over the world. FIFA employ lots of people to watch football games and collect statistics about the games. Then we turn that into the game that lots of people play at home.

Challenge Activities

1. Create a plan for the weekend. Include the day in French and say what you will do if the weather is good and bad.
2. Research what the most popular hobbies of French students in Year 7.
3. Complete the Languagenut activities.
4. Design a poster for extra-curricular activities at school. Make sure that you include the day of the week, the activity and your opinion.

Topic Links

This topic links to:

- Unit 1 – moi
- Likes and dislikes
- Healthy Lifestyles.

Additional Resources

To further practise and develop your knowledge see:

- Language nut.
- Oak academy.

Your teacher can remind you of your login.

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Computing

Our students will:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

Year 7 - 7.2: Scratch

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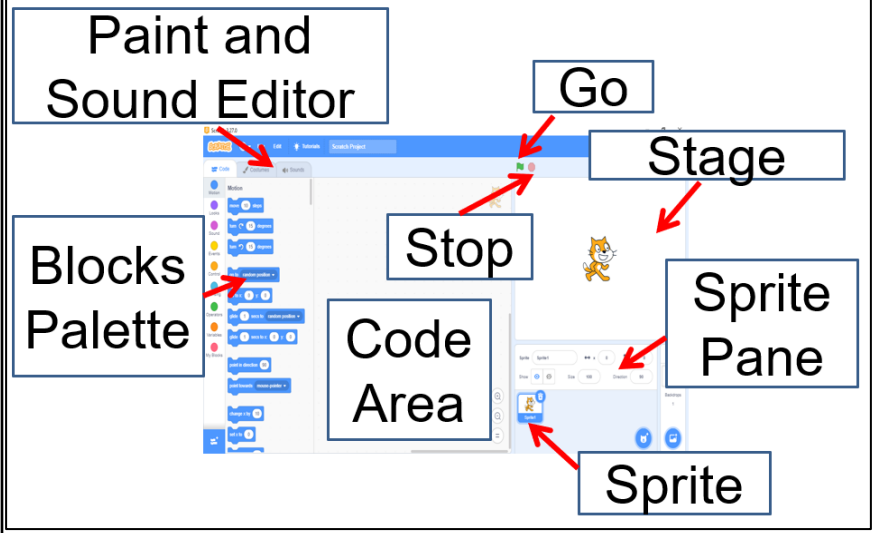
The aims of the sequence of learning are to ensure that all students:

- Describe the Scratch layout
- Describe the meaning of a range of different scripts in Scratch
- Describe the appropriate use of a range of blocks and scripts in Scratch
- Evaluate the use of blocks and scripts used to create a range of programs in Scratch
- Describe the definitions of some keywords in Scratch

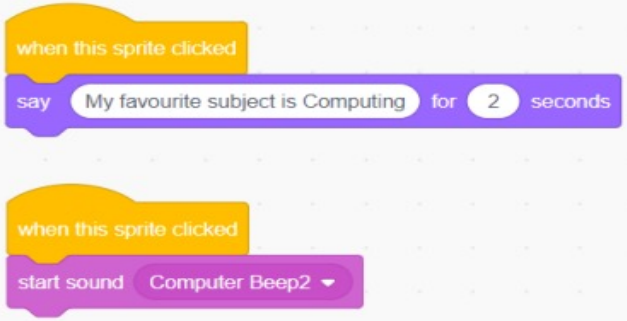
Keyword	Definition
Sprite	The programmable images on a Scratch program screen.
Script	The set of instructions that is used to program in Scratch, usually presented as a collection of blocks that connect with one another.
Costume	The different "frames" or alternate appearances of a sprite. Sprites can change their look to any of its costumes.
Comment	Adjustable yellow coloured textboxes that can be attached to blocks, or left floating, used to add detail to a program.
Sequencing	The specific order in which instructions are performed in a program. If the sequence is incorrect it may cause errors in a program.
Variable	A variable represents a location in memory. It is used to hold a value which you assign to it e.g. 'Lives' = 3
Broadcasting	Used to communicate between sprites or linked scripts to control when specific scripts are run in a program
Iteration (Loop)	The repetition of a sequence of instructions
Conditional Statement	Evaluates the state of a program to determine whether something is either true or false. If true, the conditional script will be used

Key Concepts

The Scratch layout

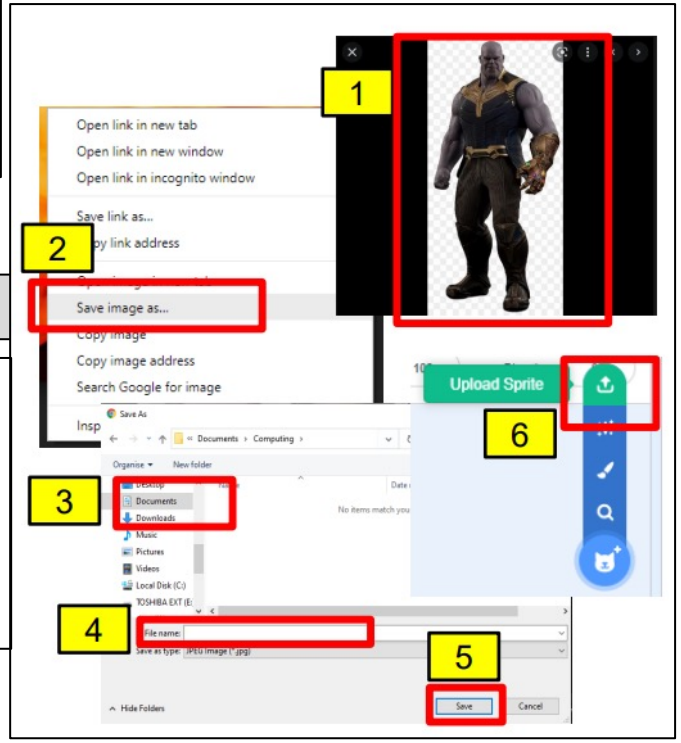


How to code an interactive sprite



How to add custom Sprites

1. Find a high resolution transparent image
2. Right click > Save image as…
3. This PC > Documents > Computing
4. Rename the file to something appropriate
5. Press Save
6. In Scratch > Upload Sprite



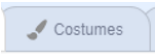
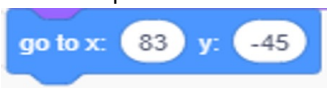
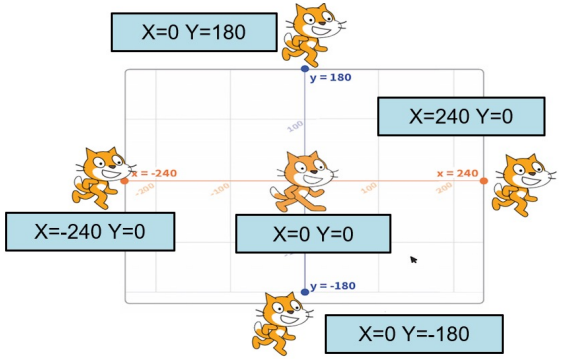
Year 7 - 7.2: Scratch

Newsome Academy
Everyone Exceptional Everyday

The aims of the sequence of learning are to ensure that all students:

- Describe the Scratch layout
- Describe the meaning of a range of different scripts in Scratch
- Describe the appropriate use of a range of blocks and scripts in Scratch
- Evaluate the use of blocks and scripts used to create a range of programs in Scratch
- Describe the definitions of some keywords in Scratch

Retrieval Practice

Questions	Answers
How do you add a new sprite in Scratch?	 Go the bottom right hand side of the scratch screen and click on the button called “Choose New Sprite”. The button likes like a cat.
What happens when you click on the ‘Green Flag’ and ‘Red Button’ on Scratch?	 Green Flag: Starts the running of scripts Red Button: Stops the scripts from running
How do you change the costume of a sprite used in the program?	 Go to the top right hand side of the scratch screen and click on the tab called “Costumes”
When using the ‘point in direction’ block, what will the numbers 0, 180, -90 and 90 do to the sprite? 	This block changes the direction of the sprite: **Number** – **Sprite Direction** 0 – Sprite faces upwards 180 – Sprite faces downwards -90 – Sprite faces towards the left 90 – Sprite faces towards the right
How can you correctly use the ‘go to…’ block to place sprites in set positions on the stage area. For example: 	Use the correct X and Y co-ordinates in the ‘go to’ block. 

Career Focus - Where could this take you?

I am a **3D modelling artist** and create the models for all 3D art assets within the game – characters, weapons, vehicles, furniture, trees, rocks and so on. Often I start with a brief or 2D drawing from a concept artist

Challenge Activities

1. Create a two player game in Scratch that uses all of the blocks, scripts and techniques you have covered in this unit. Also, research the internet and include the use of new blocks and scripts that have not been covered in this unit.
2. Create a poster on MS PowerPoint that includes one or all of the following details: variables, broadcasting and conditional statements.
3. Create a short vlog about the types of careers you could get into within the gaming industry. Explain what each type of job would involve and which opportunities would be of interest to you.

Topic Links

This topic links to:

- Computing Curriculum: Understand how instructions are stored and executed within a computer system and create, re-use, revise and re-purpose digital artefacts for a given audience
- Mathematics: use of logical inference, problem-solving skills and simple algebra

Additional Resources

To further practise and develop your knowledge see:

- https://scratch.mit.edu/
- https://www.youtube.com/c/ScratchTeam

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CAPE

Our students will:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and
- cultural development of their art forms.

- develop competence to excel in a broad range of physical activities
  are physically active for sustained periods of time
  engage in competitive sports and activities
- lead healthy, active lives.

Year 7 Art Basic Skills

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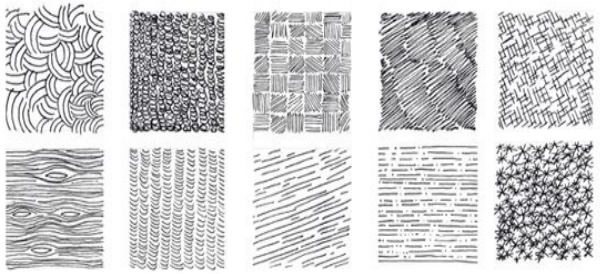
The aims of the sequence of learning are to ensure that all students:

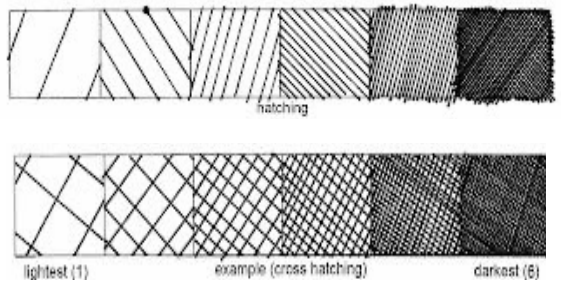
- Describe multiple methods for mark making
- Describe complementary colours
- Synthesise a 3D drawing by employing mark making techniques

Keyword	Definition
Colour	What you see when light reflects off something. Red, yellow and blue are primary colours
Line	A mark which can be long, short, wiggly, straight etc
Tone	How light or dark something is
Texture	How something looks or feels, e.g. rough or smooth
Pattern	A symbol or shape that is repeated
Shape	A 2D area which is enclosed by a line, e.g. a triangle
Form	Something which has 3 dimensions, e.g. a cube, sphere or sculpture

Key Concepts

Mark Making describes the different lines, dots, marks, patters we create in an artwork. It can be loose and gestural or controlled and neat. **Mark Making** can be used to create texture in an artwork.



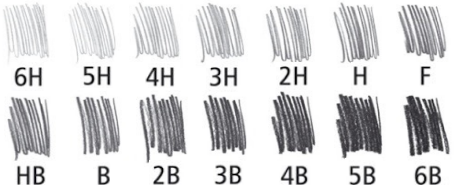


Grades of Pencils

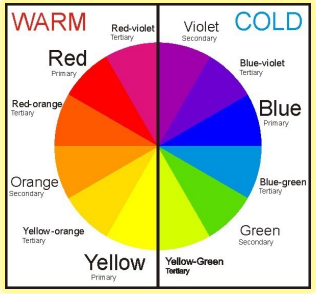
Pencils come in different grades, the

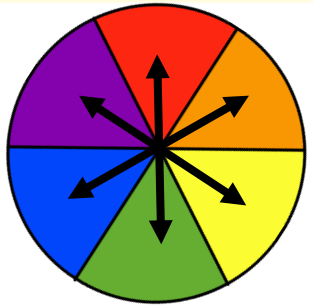
softer the pencil, the darker the tone.

H = Hard B = Black



In art the most useful pencils for shading are B, 2B and 4B. If your pencil has no grade it is likely to be HB.



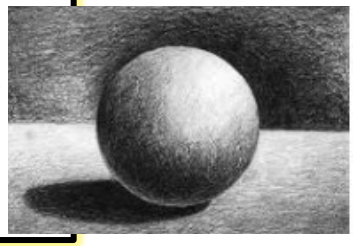


Making something look 3D

To prevent objects looking flat, a range of tonal shading is essential to make them appear 3D.

Shading straight across a surface will make an item appear flat.

Shading with the form will help to enhance the 3D surface.



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Year 7 Art Basic Skills

The aims of the sequence of learning are to ensure that all students:

- **Describe multiple methods for mark making**
- **Describe complementary colours**
- **Synthesise a 3D drawing by employing mark making techniques**

Retrieval Practice

Questions	Answers
What are complementary colours	These are colours that are found opposite each other on the colour wheel. Complementary colours are pairs of colours that contrast with each other more than any other colour, and when placed side-by-side make each other look brighter.
What are primary colours?	Red, blue and tallow. These are colours that cannot be made by mixing other colours together but are used to make all other colours.
What are secondary colours?	Green, orange and purple. Secondary colours are made by mixing two primary colours together.
What are tertiary colours?	These are colours created by mixing a primary and a secondary colour together.
What are harmonious colours?	These are colours that are next to each other on the colour wheel.
What is tint?	When you add white to a colour to make it lighter
What is shade?	When you add black to a colour to make it darker.
What is a primary source?	Observational drawing: drawing something directly from first-hand experience. Drawing from something real that is in front of you.
What is a secondary source?	Observational drawing: drawing from something that was produced by another person

Career Focus - Where could this take you?

I am a **magazine art director** and my job is to put together the illustrations and photographs for my magazine to ensure that the articles look interesting and people purchase our magazine

Challenge Activities

1. Draw an object using your mark making techniques to make it appear to be 3D.

2. Create a complementary colour wheel

Topic Links

This topic links to:

- Maths – ratios of mixing paints to make various colours
- Science – accurate observation skills

Additional Resources

To further practise and develop you knowledge see:

Here you will find why art education is important from artists, young people and major cultural figures.

Year 7 Basic Skills Dance by Chance Cunningham and Cage

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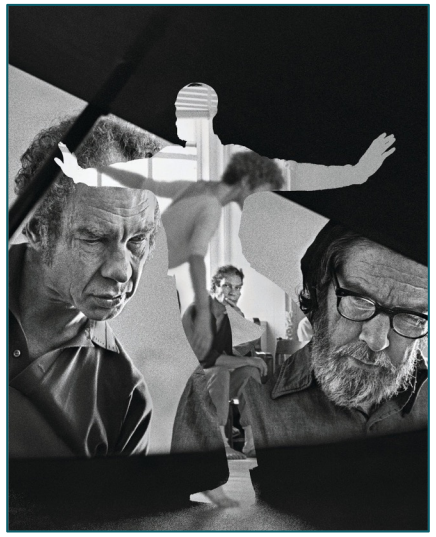
The aims of the sequence of learning are to ensure that all students:

- Define and spell key elements apply key elements in performance
- Describe elements in a performance
- Apply dance skills and techniques
- perform with timing, extension and fluency.
- develop dance by using choreographic devices.
- Demonstrate leadership skills

Keyword	Definition
Timing	Moving to the beat of the movement
Choreographic Intention	What it makes the audience think, see and feel.
Gesture	A movement that doesn't transfer weight.
Dynamics	The quality of the movement.
Unison	All together at the same time
Cannon	One after the other.
Speed	How fast or slow a movement is.
Confidence	Showing you know what you are doing and where you should be
Stamina	The ability to keep energy going over time
Flexibility	The range of movement around a joint
Strength	A combination of maximum speed and power
Coordination	The ability to move two or more body parts at the same time to create a movement
Energy	Performing all movements with as much effort as possible
Power	Is a combination of using speed and strength
Reaction time	The time it takes for you to respond to a stimulus
Accuracy	Making sure movements are the way they were taught
Facial Expression	Showing the mood of the character
Dynamics	The quality of a movement
Speed	How fast or slow a movement is

Key Concepts



Merce Cunningham

Cunningham technique focuses on the 5 movements of the back; tilt, twist, curve, arch and straight. He also invented chance choreography which used random methods to determine the movements, staging and music.

- mirroring – this technique requires dancers to do the same travel, jump, shape or balance at exactly the same time
- leading and following – these movements require one dancer to lead and the other partners to follow
- meeting, avoiding or passing by – these movements require dancers to travel towards each other and then move right or left to avoid and pass
- meeting and parting – these movements require dancers to meet, turn and travel away
- canon – this technique requires dancers to take it in turns to perform a movement that is then identically copied and performed by others
- unison – this technique requires dancers to move at the same time as each other
- contrasting – this technique requires dance partners to perform contrasting movements to each other

Year 7 Basic Skills Dance by Chance Cunningham and Cage

Newsome Academy
Everyone Exceptional Everyday

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- Describe elements in a performance
- Apply dance skills and techniques
- perform with timing, extension and fluency.
- develop dance by using choreographic devices.
- Demonstrate leadership skills

Retrieval Practice

Questions	Answers
What are performance skills?	Performance skills are those used during a performance they set dancing apart from mechanical movement they draw the audience's attention and helps to show mood and meaning.
What are physical skills?	A Physical skill is a skill that can be developed over time
What is balance?	The ability to maintain a centre of mass over a base whilst stationary (Static) or during movement (dynamic)
What are the six basic actions?	Travel, Turn, Jump, Stillness, Transfer of weight and Gesture.
What is focus?	Where the dancer looks: into space; at the audience; at another dancer or a body part

Career Focus - Where could this take you?

I am a **Personal Trainer** and it is my job to work with people on their physical skills and abilities. I designed workout routines and support clients in achieving their goals and improving their performance.

Challenge Activities

Interview and examples of work

An interview with Cunningham and Cage.

Topic Links

This topic links to:

- Drama Performance skills
- PE - Physical skills
- English - Understanding terminology and verbs.
- Maths - Problem solving

Additional Resources

To further practise and develop you knowledge see:

- https://www.bgsperformingarts.com/drama.html
- http://www.kneehigh.co.uk/page/about_kneehigh.php
- https://www.bbc.com/bitesize/subjects/zbckjxs

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Year 7 School of Rock

The aims of the sequence of learning are to ensure that all students:

- Be able to replicate a set phrase.
- Be able to develop my dance using different choreographic devices

Keyword	Definition
Six basic Actions	Travel , Turn, Jump, Gesture, Stillness, Transfer of weight.
Choreographic Intention	T make the audience think see and feel.
Gesture	A movement that doesn't transfer weight.
Dynamics	Quality of movement. How you move.
Unison	All together at the same time.
Cannon	One movement after the other.
Speed	How fast or slow a movement is.

Key Concepts

Performance Skills

Performance Skills -: Performance skills are those used during a performance they set dancing apart from mechanical movement they draw the audience's attention and helps to show mood and meaning.

Timing : Moving to the beat of the movement.

Confidence : Showing you know what you are doing and where you should be.

Energy: Performing all movements with as much effort as possible.

Accuracy: Making sure movements are they way they were taught.

Focus: Where the dancer looks. Into space, at the audience, Another dancer, A body part.

Facial Expression : Showing the mood of the character.

Dynamics : The quality of the movement.

Speed : How fast or slow a movement is.

Physical skills

Physical skill: A Physical skill is a skill that can be developed over time.

Stamina: The ability to keep energy going over time.

Flexibility : The range of movement around a joint.

Strength :A combination of maximum speed and power.

Coordination : The ability to move two or more body parts at the same time to create a movement.

Balance: The ability to maintain a centre of mass over a base whilst stationary (Static) or during movement (dynamic)

Power : Is a combination of using speed and strength

Reaction time: The time it takes for you to respond to a stimulus.

Newsome Academy
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Year 7 School of Rock

The aims of the sequence of learning are to ensure that all students:

- Be able to replicate a set phrase.
- Be able to develop my dance using different choreographic devices

Retrieval Practice

Questions	Answers
What is musical Theatre?	A story told through Music dance and drama.
What is a theme ?	A reoccurring idea that runs through the dance.
What is a Stimulus ?	An initial idea or starting point.
What is choreography?	The art of making dancers.
What is a motif ?	A motif is a movement phrase (a short dance) that can be repeated and developed throughout the dance.

Career Focus - Where could this take you?

I am a **camera man**. I use my knowledge of performance and choreography to ensure I take the best shots and my angles highlight the best features of the performance.

Challenge Activities

Stick it to the man

School of rock trailer.

School of rock worksheet

Topic Links

This topic links to:

- Drama Performance skills
- PE - Physical skills
- English - Understanding terminology and verbs.
- Maths - Problem solving.

Additional Resources

To further practise and develop your knowledge see:

- https://www.onedanceuk.org/

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Year 7 Drama and Storytelling

The aims of the sequence of learning are to ensure that all students:

- **develop knowledge of what Drama Elements mean.**
- **develop drama technique and skills.**
- **Identify and perform drama**

Keyword

Storytelling	Gesture
Still image	Projection
Narration	Performance
Body Language	Volume
Facial expression	Timing
Characterisation	Pause
Space	Pace
Levels	Posture
Improvisation	Hot-Seating

Key Concepts

Thinking Questions

- How am I showing my character?
- What is my body language?
- How is it different to my normal?
- What is my character feeling?
- Do my facial expressions match this?
- What is my posture like?
- How do I walk? What is my gait like?
- How do I react to the other characters?
- How close do I stand next to others

Techniques:

Projection (Speaking loud enough for the audience to hear you)
Characterisation (Making and being in character that is different to yourself)
Posture (How you stand and how that is different to you normally)
Narration (Used in the art of storytelling. Its purpose is to tell stories. Narration can be factual or fictional)

A good devised performance ...

Will have a range of different believable characters. It will use a set scenario or one you have made up. The audience will be able to understand what is happening and will be engaged by the action and the storyline.

STORYTELLING DRAMA

You will be developing your knowledge and understanding of DRAMA, STORYTELLING, DEVISING and CHARACTERISATION. These are key drama skills that you will need. We will be creating MYTHICAL characters and creating improvised performances where good characters overpower evil forces to right wrongs.

Assessment

You will take part in several peer and self assessment tasks over the project, as well as your teacher assessment. receiving feedback from your teacher.
Your assessment for this Topic will be based on creating characters and devising performances, before evaluating them.

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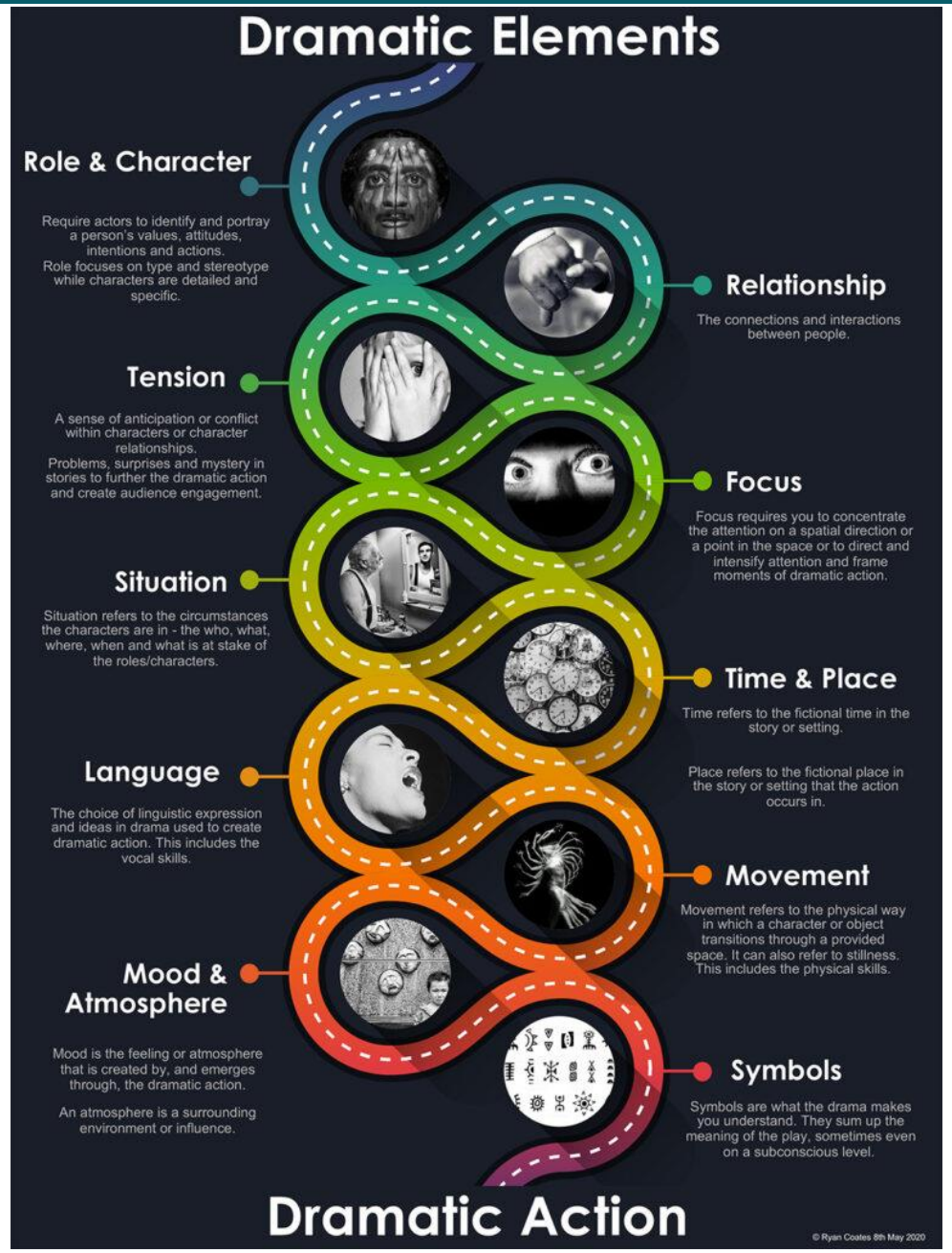
Year 7 Drama and Storytelling

The aims of the sequence of learning are to ensure that all students:

- **develop knowledge of what Drama Elements mean.**
- **develop drama technique and skills.**
- **Identify and perform drama**



Career Focus - Where could this take you?

I am a Physical theatre performer. Knowledge of different movement traditions, such as mime and clowning is very important. Being able to utilize your facial expressions, body language, posture, spatial awareness, and physicality to tell a story is key to engaging the audience.

Challenge Activities

Write a short 50-100 word description of a lesson or Drama activity you are doing in school. Are you learning a new skill? What is it? How will you learn this skill? Or are you developing a skill you already have to make it better? Which one? How?

Prove that you took part in this activity. You could film yourself doing a version at home, or write up a step-by-step list of all of the things you did.

Write 200 words which explain what you have learnt by taking part in and doing the lesson and how your interests, knowledge and skills have developed. Be specific about your skills.

Topic Links

Dance
Music
English
History

Additional Resources

If you want to do more and extend yourself in Drama…Explore the Arts as a participant

Watch to learn more about tableau/still-image

https://youtu.be/YfNmlY1-t5k

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Year 7 Food Tech

The aims of the sequence of learning are to ensure that all students:

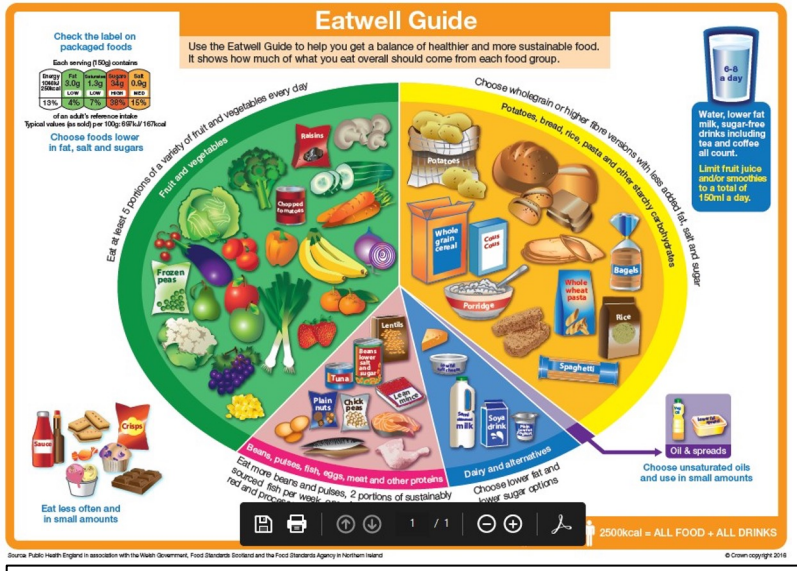
- to be able to name the key nutrients, sources and functions
- to acquire and demonstrate a range of food skills and techniques
- to be able to acquire and demonstrate the principles of food hygiene and safety
- to be able to identify how and why people make different food and drink choices
- to acquire and apply a knowledge and understanding of food science;

Keyword	Definition
Weighing scales	A tool used to accurately measure the weight/mass of ingredients
Knife	A sharp tool used for cutting food. Different types of knives have different uses, e.g. bread knife, fish knife
Chopping board	Board used for cutting food on to protect work surfaces. Generally made from glass, plastic or wood
Saucepan	A larger pan used for boiling water or making sauces
Wooden spoon	Used for stirring hot food as the material insulates the heat well
Tablespoon	A measure of 15 millilitres
Teaspoon	A measure of 5 millilitres
Dessert spoon	A spoon midway in size between a teaspoon and a tablespoon
Grater	A metal tool used for grating food into much smaller pieces
Baking tray	A metal or Pyrex tray used in the oven to cook food on
Cooling rack	A wire rack used to cool food, often baking
Peeler	Tool used for removing the skin/peel from a food item, usually a fruit or vegetable
Spatula	A broad, flat tool used for mixing or spreading
Nutrient	a substance that provides nourishment essential for the maintenance of life and for growth.
Healthy	in a good physical or mental condition; in good health.

Key Concepts

Food skill	Food skill	Food skill
Bake	Fry and sauté	Portion / divide
Beat	Glaze and coat	Prove
Blitz, puree and blend	Grate	Roast
Casserole	Grill	Roll-out
Chill	Juice	Rub-in

Core		Knead		Sift	
Cream		Layer		Snip	
Crush		Mash		Spread	
Cut out		Measure		Stir-try	
Cut, chop, slice, dice and trim		Melt, simmer and boil		Weigh	
Decorate and garnish		Microwave		Whisk	
Drain		Mix, stir and combine		Zest	



The 4C's Concept

By practicing the four Cs of food hygiene **cross-contamination, cleaning, cooking and chilling** those working with food can avoid food poisoning and other illnesses.

COOKING CONVERSION CHART

Measurement

CUP	ONCES	MILLILITERS	TABLESPOONS
8 cup	64 oz	1895 ml	128
6 cup	48 oz	1420 ml	96
5 cup	40 oz	1180 ml	80
4 cup	32 oz	960 ml	64
2 cup	16 oz	480 ml	32
1 cup	8 oz	240 ml	16
3/4 cup	6 oz	177 ml	12
2/3 cup	5 oz	158 ml	11
1/2 cup	4 oz	118 ml	8
3/8 cup	3 oz	90 ml	6
1/3 cup	2.5 oz	79 ml	5.5
1/4 cup	2 oz	59 ml	4
1/8 cup	1 oz	30 ml	3
1/16 cup	1/2 oz	15 ml	1

Temperature

FAHRENHEIT	CELSIUS
100 °F	37 °C
150 °F	65 °C
200 °F	93 °C
250 °F	121 °C
300 °F	150 °C
325 °F	160 °C
350 °F	180 °C
375 °F	190 °C
400 °F	200 °C
425 °F	220 °C
450 °F	230 °C
500 °F	260 °C
525 °F	274 °C
550 °F	288 °C

Weight

IMPERIAL	METRIC
1/2 oz	15 g
1 oz	29 g
2 oz	57 g
3 oz	85 g
4 oz	113 g
5 oz	141 g
6 oz	170 g
8 oz	227 g
10 oz	283 g
12 oz	340 g
13 oz	369 g
14 oz	397 g
15 oz	425 g
1 lb	453 g

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Year 7 Food Tech

The aims of the sequence of learning are to ensure that all students:

- to be able to name the key nutrients, sources and functions
- to acquire and demonstrate a range of food skills and techniques
- to be able to acquire and demonstrate the principles of food hygiene and safety
- to be able to identify how and why people make different food and drink choices
- to acquire and apply a knowledge and understanding of food science;

Retrieval Practice

Questions	Answers
What are 8 tipcs for healthy eating?	Base your meals on higher fibre starchy carbohydrates. Eat lots of fruit and veg. Eat more fish, including a portion of oily fish. Cut down on saturated fat and sugar. Eat less salt: no more than 6g a day for adults. Get active and be a healthy weight. Do not get thirsty. Do not skip breakfast
Why is weighing and measuring important?	Weighing and Measuring For good results in most recipes, accurate weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes would not rise or you could spoil the taste and/or texture. Food can be weighed in Grams (g) and there are 1000g in a Kilogram (kg). Liquid is measured in Millilitres (ml) or litres
What are the most important health and safety and personal hygiene rules?	Be aware of sharp equipment such as knives, peelers and graters- store them carefully and use the bridge hold and claw grip when chopping. Take care with hot equipment and food/ liquids- turn pan handles in, always use oven gloves and avoid splashes when stirring or draining foods. Wipe up spills quickly so you do not slip over Be aware of others in the kitchen Report any accidents to the teacher Tie hair back Wash your hands

Career Focus - Where could this take you?

My job is **food technologist** and I study foods and their nutritional content. I use laboratory skills and techniques to identify nutrients and calorie content of foods.

Challenge Activities

Try some of these recipes at home
Follow the links

Energy Bar

Home made burgers

Chapatti recipe

For Further 30 minute recipes

Food skills are acquired, developed and secured over time

.

Bridge hold

Claw grip

Topic Links

This topic links to:

- English - relating explicitly to known vocabulary and understanding it with the help of context
- Mathematics - use standard units of mass, length, time, other measures
- Science: Nutrition and digestion RSE - What constitutes a healthy diet
- Physical health and fitness - The characteristics and mental and physical benefits of an active lifestyle.

Additional Resources

To further practise and develop you knowledge see:

Eat well guide Quiz

Eat well guide

Eat well video resource

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Year 7 Food Tech

The aims of the sequence of learning are to ensure that all students:

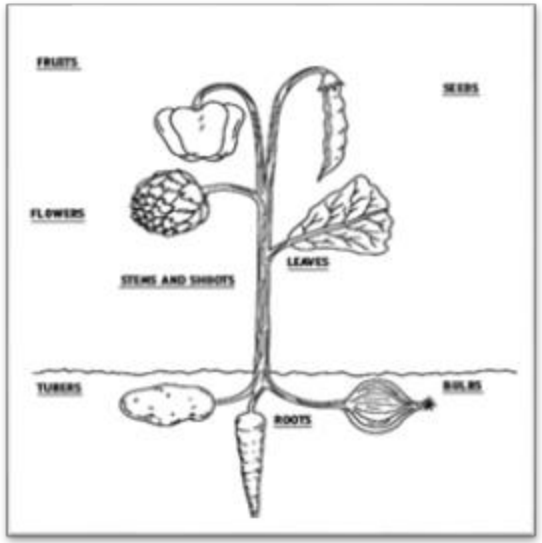
- Learn the basics of health & safety in the kitchen
- Learn how to recognise and categorise fruit and vegetables
- Be able to select and prepare (including chop safely) vegetables
- Learn how to cook pasta, rice and noodles
- Learn the difference between healthy and unhealthy food and the importance of nutrients
- To be able to prepare, cook and present a healthy hot meal

Keyword	Definition
Weighing scales	A tool used to accurately measure the weight/mass of ingredients
Knife	A sharp tool used for cutting food. Different types of knives have different uses, e.g. bread knife, fish knife
Chopping board	Board used for cutting food on to protect work surfaces. Generally made from glass, plastic or wood
Saucepan	A larger pan used for boiling water or making sauces
Frying pan	A frying pan is a flat-bottomed pan used for frying or sautéing food
Grater	A metal tool used for grating food into much smaller pieces
Baking tray	A metal or Pyrex tray used in the oven to cook food on
Cooling rack	A wire rack used to cool food, often baked products
Carbohydrate	Carbohydrates provide energy for the body. The body breaks carbohydrates down into glucose, which is the primary energy source for the brain and muscles.
Protein	Protein is one of the three nutrients found in food that the body needs in large amounts. It is essential for the maintenance and building of body tissues and muscle.
Fibre	Fibre is a type of carbohydrate that the body cannot break down and so it passes through our gut into our large intestine (or colon). It is found naturally in plant foods like wholegrains, beans, nuts, fruit and vegetables and is sometimes added to foods or drinks. Fibre helps to keep our digestive system healthy and helps to prevent constipation.
Fat	The body uses fat as a fuel source. It is the major storage form of energy in the body. Fat also has many other important functions in the body, and a moderate amount is needed in the diet for good health. Too much fat or too much of the wrong type of fat can be unhealthy.
Cross-contamination	Cross-contamination is the physical movement or transfer of harmful bacteria from one person, object or place to another.
Nutrient	A substance that provides nourishment essential for the maintenance of life and for growth, e.g. calcium, iron etc
Healthy	In a good physical or mental condition; in good health.

Key Concepts

The 4Cs Concept

By practicing the four Cs of food hygiene **cross-contamination, cleaning, cooking and chilling** those working with food can avoid food poisoning and other illnesses.



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Retrieval Practice

Questions	Answers
What are 8 tips for healthy eating?	• Base your meals on higher fibre starchy carbohydrates. • Eat lots of fruit and veg. • Eat more fish, including a portion of oily fish. • Cut down on saturated fat and sugar. • Eat less salt: no more than 6g a day for adults. • Get active and be a healthy weight. • Do not get thirsty. • Do not skip breakfast
Why is weighing and measuring important?	Weighing and Measuring for good results in most recipes, accurate weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes will not rise or you could spoil the taste and/or texture. Food can be weighed in Grams (g). 1000g = 1 Kilogram (kg). Liquid is measured in Millilitres (ml) or litres (l). 1000ml = 1 Litre(l)
What are the most important health and safety and personal hygiene rules?	• Be aware of sharp equipment such as knives, peelers and graters- store them carefully and use the bridge hold and claw grip when chopping. • Take care with hot equipment and food/ liquids- turn pan handles in, always use oven gloves and avoid splashes when stirring or draining foods. • Wipe up spills quickly so you do not slip over • Be aware of others in the kitchen • Report any accidents to the teacher • Tie hair back • Wash your hands

Career Focus - Where could this take you?

My job is a **food technologist** and I study foods and their nutritional content. I use laboratory skills and techniques to identify nutrients and calorie content of foods.
I need a genuine interest in science and how it is applied to food and cookery, high standards of cleanliness and the ability to adhere to strict hygiene rules.

Challenge Activities

Try some of these recipes at home
Follow the links below:

Energy Bar

Home made burgers

Chapatti recipe

For Further 30 minute recipes

Food skills are acquired, developed and secured over time
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Additional Resources

To further practise and develop you knowledge see:

Eat well guide Quiz

Eat well guide

Eat well video resource

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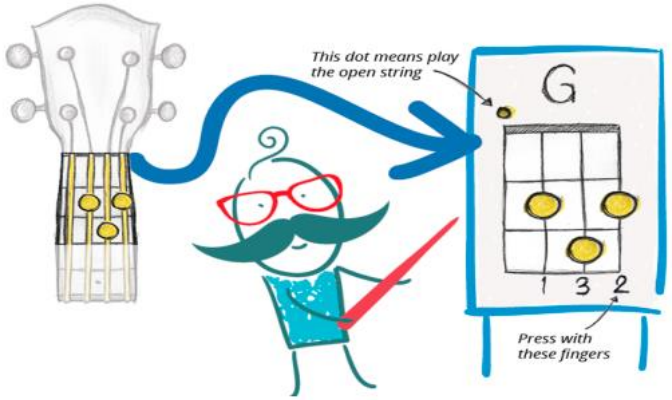
Year 7 Ukulele

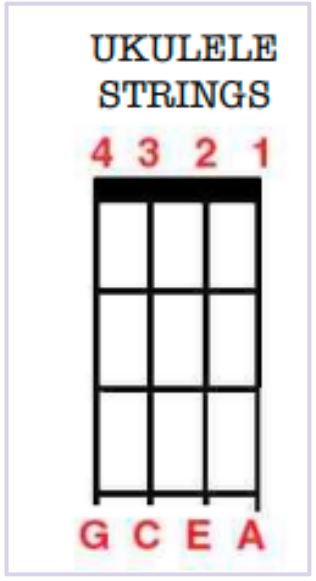
The learning outcomes for this topic are:

- What musical elements are, how and why we use them in music, and how to use them within your singing and playing
- How to play a range of chords on the ukulele, including C, Am, F and G
- How to recognise the musical elements when listening to music and how to use them when playing and singing music
- How to use correct technique when holding and playing the ukulele

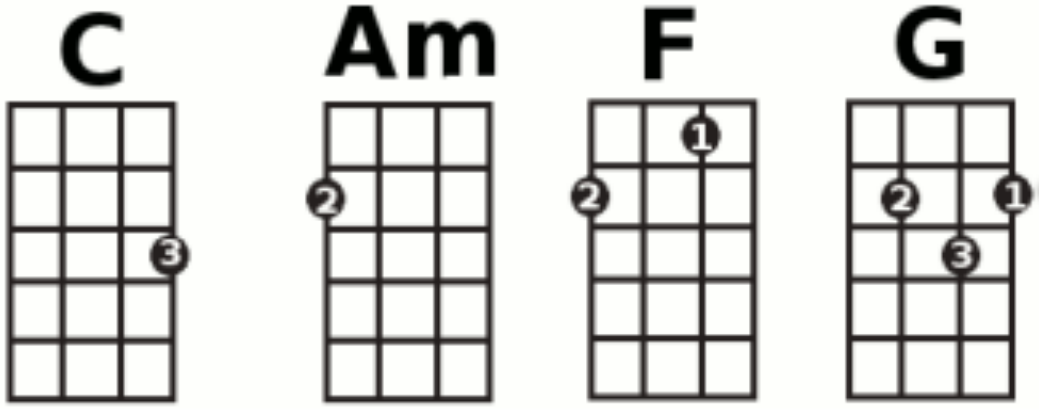
Keyword	Definition
Dynamics	How loud or soft the music is and how this changes
Tempo	How fast or slow the music is and how this changes
Texture	The layers within the music - how thick or thin the music is
Pitch	how high or low the music is
Timbre	The tone of the instrument
Attack & Decay	How sounds start and stop - suddenly or gradually
Silence	When no sound is used
Ukulele	The ukulele is a four stringed instrument which looks more or less like a miniature classical guitar.
Strumming	To play all 4 strings by sweeping down with your hand or a plectrum
Picking	To play or 'pick individual strings to create a melody
Technique	The correct was to play the instrument
Chord	Multiple notes played at the same time

Key Concepts





These are the main chords we will be using



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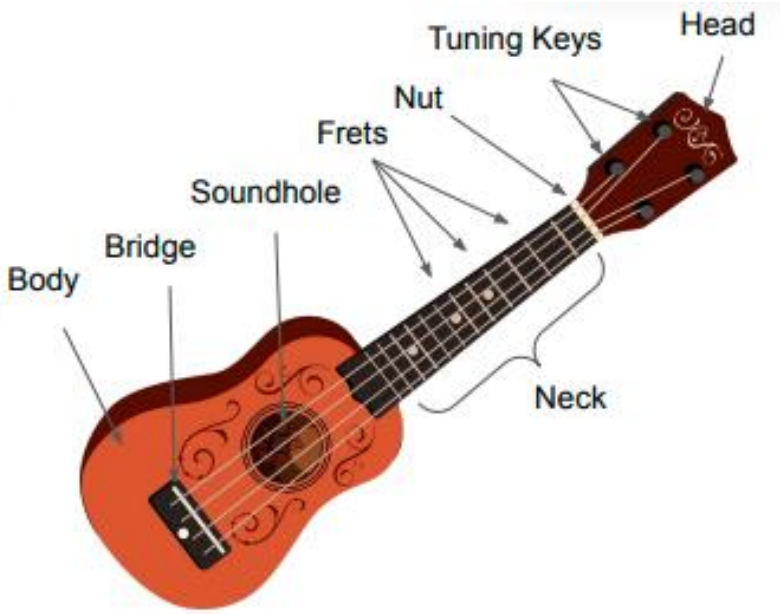
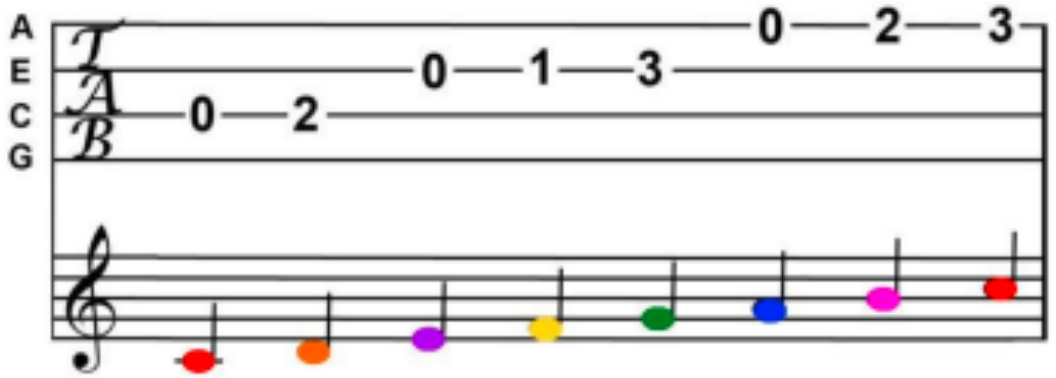


STRUMMING SYMBOLS

D = Down
U = Up
X = Tap/Hit

C MAJOR SCALE ON UKULELE



Career Focus - what skills are you learning?

I am a ukulele player and I have to use lots of **skills** to play this instrument. I have to use **coordination** as my left hand is always doing something different to my right. I have to **listen** very carefully so I know what I am playing is correct. This also helps when I am playing in a group and demonstrating good **teamwork**. I also have to **read** the chords as I play. **Coordination** and **teamwork** are skills needed in many other jobs and careers.

Challenge Activities

How well do you know your musical elements? Take this quiz to find out.
Elements Quiz Link

Here is a more indepth quiz to really test yourself:
Challenge Elements Quiz

Listen (and watch) the following piece of music by clicking here "Thunderstorm" a graphic notation composition by Alex Chorley, age 12and describe the musical elements within it.

Topic Links

Band Skills
Rhythm & Pulse
Geography and culture
Literacy - keywords and spellings
Numeracy - Counting, rhythm, understanding patterns

Further Listening

Ukulele Orchestra of Great Britain

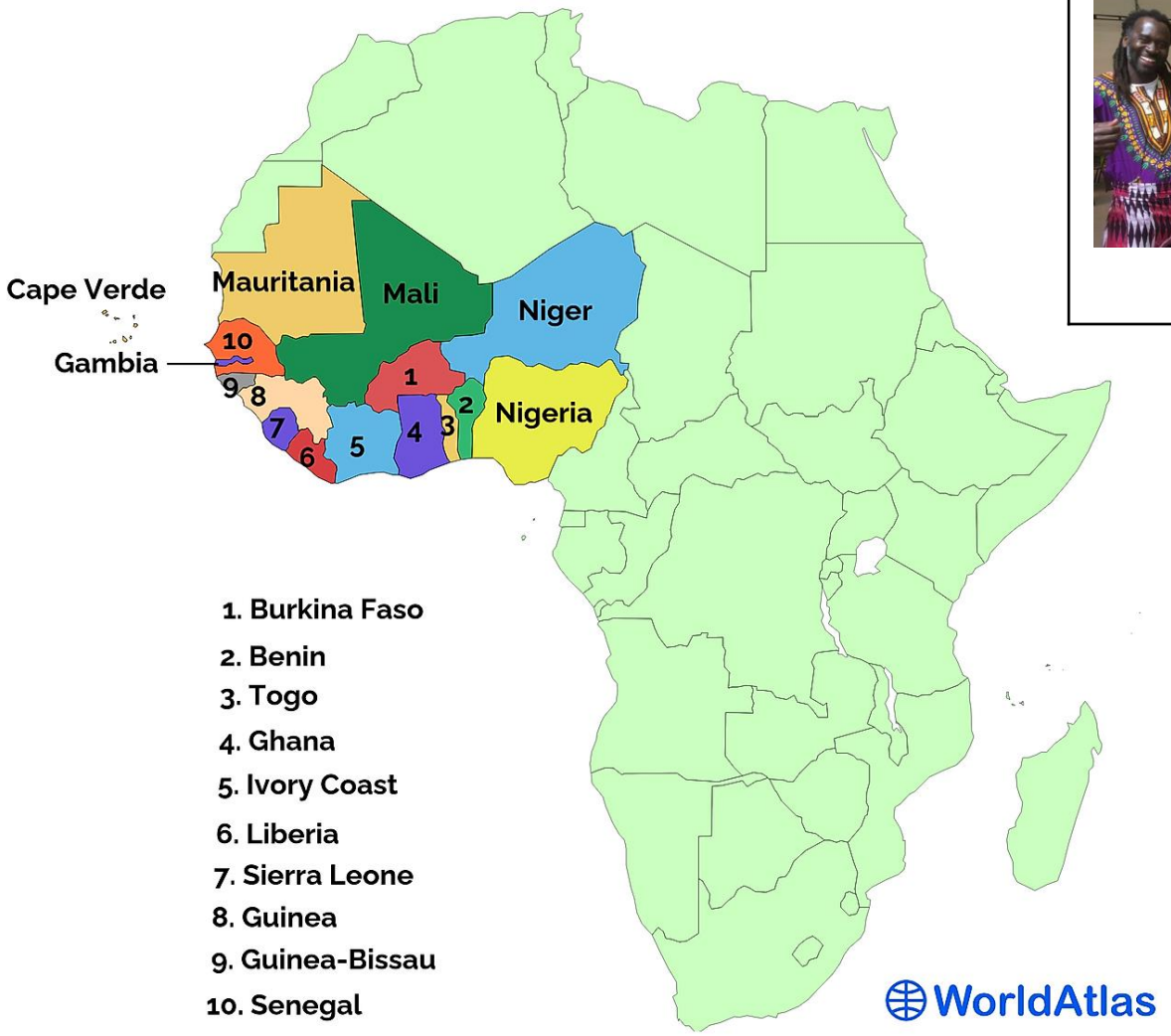
George Formby

Year 7 West African Djembe Rhythms

The learning outcomes for this topic are:

- To understand the importance of rhythm in West African culture
- To be able to play the djembe using correct technique
- To be able to improvise rhythms
- To develop ability to compose in groups

Map of West Africa



Career Focus - Where could this take you?

We are djembe drummers. Group composition requires us to respect the ideas and contributions of others in the group. It also builds teamworking skills as we have to work creatively with other musicians.
It is important to learn about music from all over the world to understand different backgrounds and cultures. Tolerance is one of the core British values. Teamwork, creativity and respecting others are important in most jobs and careers

Challenge Activities

1. Here's a rhythm quiz to really test your knowledge:
   https://www.macprovideo.com/course/musictheory103-rhythm/quiz

2. Here is an online djembe lesson. See if you can learn this rhythm:
   https://www.youtube.com/watch?v=jfNs0Z2duPs&ab_channel=DjembeGuru

Further Listening:

- Jalikunda African Drums' on YouTube
- 'Kasiva Mutua: How I use the drum to tell my story' on YouTube
- Famoudou Konate - Spotify

Topic Links

This topic links to other music topics such as:

- Rhythm, pulse and tempo
- Group composition
- Performance skills
- Geography and culture
- Literacy – Keywords and spelling
- Oracy – singing/chanting

Additional Resources

To further practise and develop your knowledge see:

BBC Bitesize – Music of Africa:
https://www.bbc.co.uk/bitesize/guides/zhsny4j/revision/1

Free online djembe lessons and information:
https://afrodrumming.com/

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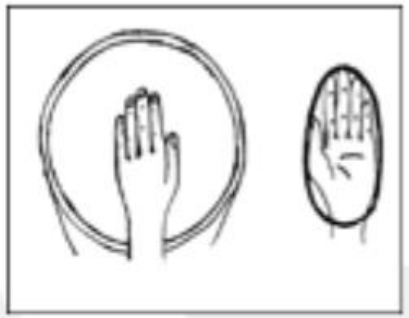
Keyword	Definition
Rhythm	a strong, regular repeated pattern of movement or sound
Dynamics	The volume of a note or sound
Duration	The length of a note or sound
Pulse	A steady beat like a ticking clock or your heartbeat. It can be measured in time by counting the number of beats per minute (BPM).
Tempo	The speed of the pulse.
Ostinato	A short, repeating pattern.
Polyrhythm	When two or more rhythms are being played at the same time.
Improvisation	To make music up in the moment, without planning or rehearsing what you will play.
Imitation Call and Response	One drummer plays a rhythm and the rest of the group repeat it exactly
Master drummer/ griot	The master drummer is the leader of the group. They give the cues and lead the call and response. Griots are the wise leaders and musicians of West African villages.

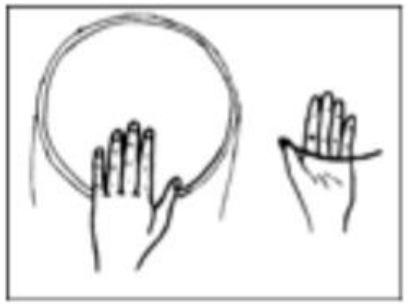
Key Concepts

Djembe Hand Techniques



Bass is played in the center of the head with your fingers closed and your hand flat.

Tone is played on the edge of the djembe with your fingers closed and your hand cupped.



Slap is played near the edge of the head with your fingers open.

Djembe Parts

Head - traditionally made of goat skin. Mass-produced djembe heads are made of plastic that is textured to look like animal skin.

Tuning ropes - These ropes are tied tight to apply pressure to the head. This means the drum has a higher pitched sound when we hit it.

Body - The main part of the djembe is traditionally made from wood. Some modern djembes are made from metal.

The body of the djembe is hollow. This allows the air to escape, giving the instrument more volume.

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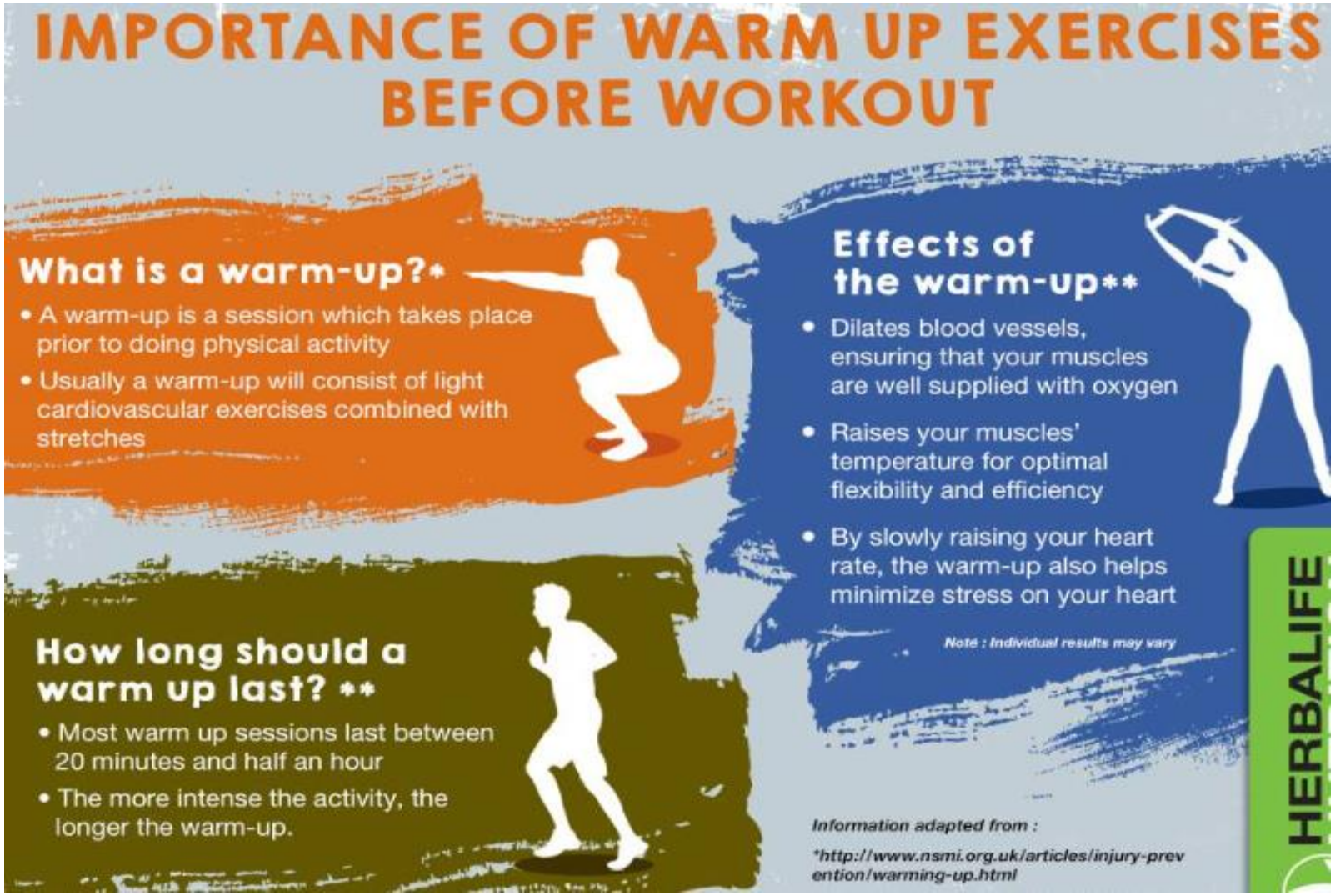
Year 7 Health and Fitness

The aims of the sequence of learning are to ensure that all students:
Being able to demonstrate the: set up, completion and interpretation of fitness tests. Learning about and understanding the components of fitness and how they can be trained. Learning which components of fitness are important to specific types of athlete. Learning about and completing training sessions to train specific components of fitness. Learning how to live a healthy, active lifestyle.

Keyword	Definition
Power	Power = strength x speed. They are used together to move in sport.
Co-ordination	The ability for muscles to move different body parts in time.
Reaction Time	The time taken for a person to react to the movement in sport.
Agility	The ability to change direction at speed.
Balance	The ability to maintain your centre of mass and control without falling over.
Speed	To move quickly in the shortest time over a distance. Speed=distance/time.
Cardiovascular endurance	The ability for the heart and blood vessels to transport oxygenated blood to the working muscles so they work for a long time.
Muscular strength	The maximum force that your muscles can make to move an object.
Muscular endurance	Your muscles can work continuously at a low to medium level for a long period of time without them getting tired.
Flexibility	This is the range of movement that can be performed around a joint by the muscles.
Body composition	This is the total amount of fat, bone and muscles of a person's body.

Key Concepts You should already know:- Some components of fitness and be able to apply them to a healthy and active lifestyle
You will be assessed on:- Understanding - Technique - Application - Leadership

Health and Fitness Key Concepts



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Retrieval Practice:

Use the missing words to complete the fitness testing protocols for the three different tests below.

What is the test protocol?
(Fill in the missing words)

Missing words:
Between,
Side,
Average,
Static,
Tips

Standing Long Jump test

- The athlete chalks the end of his/her finger tips
- The athlete stands _____ onto the wall, keeping both feet remaining on the ground, reaches up as high as possible with one hand and marks the wall with the _____ of the fingers
- The athlete from a _____ position jumps as high as possible and marks the wall with the chalk on his fingers
- The assistant measures and records the distance _____ the two marks
- The athlete repeats the test 3 times
- The assistant calculates the _____ of the recorded distances and uses this value to assess the athlete's performance.

What is the test protocol?
(Fill in the missing words)

Missing words:
Tips,
Extended
Reaches
Average
Shoes

Sit and reach test

- The athlete warms up for 10 minutes and then removes their _____.
- The assistant secures the ruler to the box top with the tape so that the front edge of the box lines up with the 15cm (6 inches) mark on the ruler and the zero end of the ruler points towards the athlete.
- The athlete sits on the floor with their legs fully _____with the bottom of their bare feet against the box.
- The athlete places one hand on top of the other, slowly bends forward and _____along the top of the ruler as far as possible holding the stretch for two seconds.
- The assistant records the distance reached by the athlete's finger _____(cm).
- The athlete performs the test three times.
- The assistant calculates and records the _____of the three distances and uses this value to assess the athlete's performance.

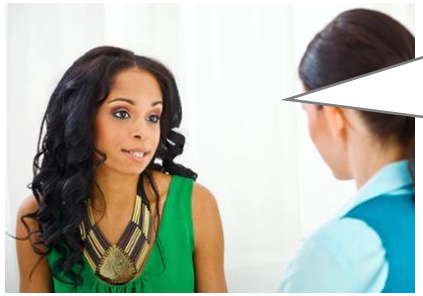
What is the test protocol?
(Fill in the missing words)

Missing words:
Whistle
Warms up
Go
400m
12 minutes

Cooper 12 min run

- The athlete _____ for 10 minutes.
- The assistant gives the command "____", starts the stopwatch and the athlete commences the test.
- The assistant keeps the athlete informed of the remaining time at the end of each lap (_____).
- The assistant blows the _____ when the _____ has elapsed and records the distance the athlete covered to the nearest 10 metres.

Career Focus - Where could this take you?



My career is known as a healthy lifestyle coach. I help people with problems linking to their health. I give advice on how people can change their physical, mental and social health by setting goals and targets for people to achieve over a set time period.

My job is very rewarding as it makes a positive impact on people's lives.

Challenge Activities

Design a Fitness test knowledge card:-
Can you create a fitness test card that shows the instructions on how to complete the tests and include a picture and diagram to help with your understanding. This could be completed using a computer or on A4 paper.

Create a match the keywords to definition poster:-
Select between four to six different keywords and match them to the correct definition answers. Make sure on the reverse of your skill card you have included the correct answers so students can test and assess themselves and others.

Topic Links

This topic links to:
- RSHE – Understanding physical activity can help with physical, mental and social wellbeing
- English – understanding and defining key terminology
- Mathematics – problem solving, recording figures and analysing performance.
- Voice 21 – testing others in the class on keywords and the reasons why it is important to warm up.

Additional Resources

To further practise and develop your knowledge see:

https://www.topendsports.com/testing/tests/

https://www.teachpe.com/training-fitness/fitness-testing

Year 7 Trampolining

The aims of the sequence of learning are to ensure that all students:

- Identify at least 4 core trampolining skills.
- Demonstrate basic core skills such as a straight jump.
- Demonstrate a 5 bounce routine.
- Lead a small group of peers in a warm up.

Keyword	Definition
Spotting	Standing around the trampoline to help prevent the performer from falling.
Aesthetic	The way something looks/something looking artistic.
Flexibility	The range of motion allowed at a joint.
Pike	Jumping with the legs extended out in front of the body and toes pointed.
Tuck	Jumping with the knees flexed and toes pointed down.
Straddle	Jumping with the legs extended diagonally from the hips.
Feedback	Information given to an individual/team about their performance.

Key Concepts

Plantar-flexion occurs at the ankle to allow you to point your toes. Make sure your toes are pointed when performing a core skill such as a **straight jump.** This makes your performance **aesthetic.**

Above are the basic jump shapes you will achieve by the end of the block. Take note of how the legs and feet are used to make the move aesthetic.

What you should already know:

- Basic gymnastics balances
- Basic understanding of body movement

Use the **feedback** sentence starters above to provide **feedback** to a **peer.**

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- Demonstrate a 5 bounce routine.
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Retrieval Practice

Questions	Answers
What are the most important components of fitness for a trampolining athlete?	Flexibility, balance, coordination.
Why is it important that a trampolining move is done in an aesthetic way?	To ensure that the audience can see the full extent of the performance.
What is the difference between a straight bounce and a tuck jump?	On a straight jump the legs are straight and the toes pointed. On a tuck jump, the knees are flexed with the toes pointed.
Why is it important that you can stop safely on the trampoline?	To reduce the risk of injury when finishing a move.
Explain the term aesthetic	The way something looks/something looking artistic
What are the three basic jump shapes?	Tuck, straddle and pike.

Career Focus - Where could this take you?

I am a performance coach. I help people become better at something they want to do. This could be anything from playing a sport, to learning a musical instrument, to giving speeches. I work with the person to identify their strengths and weaknesses and help them develop a plan to improve their skills and achieve their goals. I help the person reach their full potential.

Challenge Activities

Create:

- Create a 5 bounce routine using the correct trampolining terminology. You can use this routine in class so make sure it only has skills in which you can perform.
- Create a mind map containing all of the basic core skills you have learnt about – draw a diagram showing how each is completed. Label key components e.g. pointed toes.

Topic Links

This topic links to:

- Science – anatomy and physiology
- Maths – Angles
- Voice 21 – verbal feedback to peers
- English – understanding and defining key terminology

Additional Resources

To further practise and develop your knowledge see:

- https://www.bbc.co.uk/bitesize/guides/z39ck7h/revision/1
- https://www.youtube.com/watch?v=M_h9dmJ3NmM

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Usernames and Passwords

Newsome Academy

RESPECT | INTEGRITY | TEAMWORK | ASPIRATION

FAIL EARLY - FAIL FORWARD - FAIL OFTEN | SEIZE EVERY MINUTE | BE BRAVE - BE PRESENT - BE YOU

NON NEGOTIABLE EQUIPMENT

BLACK PEN

PURPLE PEN

PENCIL

BONUS ITEMS

HIGHLIGHTER | RUBBER | GLUE STICK | CALCULATOR

RULER

PLACE YOUR EQUIPMENT ON THE PLACEMAT TO SHOW YOUR TEACHER YOU ARE PREPARED AND READY FOR LEARNING