

Monday 11th May

Dear Year 6,

We hope you and your families are keeping well and have had a good week.

Here are the activities for this week for you to follow and complete. The Science and History may take more than one session so plan to spend a little longer on these subjects - perhaps over two days.

Try to read for at least 20 minutes a day and take Accelerated Reader quizzes from home by using this link [Howley Grange Renaissance at home](#) and logging on as usual using your username and password. To check that the book you are reading has a quiz, you can check it using on [Accelerated Reader Bookfinder](#). It's okay to read books which haven't got a quiz - just keep a record of what you have read.

This week would have been SATs week so there are some optional **fun** SAT papers to do at a time that's best for you. We've put them as a separate home-learning pack. We hope that you'll have a giggle when you complete and mark them at home!

As always, remember to take time to relax, exercise and be kind to yourselves and each other.

Take care and keep smiling,

Mrs Graham and Mrs North

English - Doors - the world of possibility

This week we will complete this unit of writing. Make sure you have had the chance to look back at all of the work we have done towards this in the two weeks 20th-24th April and 27th April - 1st May as this will really help you.

Doors

-the world of possibility

Year 6 Workbook

by Jamie Thomas



Introduction

Have you ever looked at a door and wondered what might be on the other side? Where may it lead? What may be hiding within? At first glance, a door is just a piece of wood, glass or metal that is opened and closed so that people can get in and out of a room, a vehicle or a space. But in the hands of a writer, a door represents a world of possibility, a world where things are not only hidden but often closed off and restricted. Together, through poetry, text games and narrative, we shall explore the potential that a door offers to you, the writer.

English Activity 1a - through the eyes of a character



One of the things I love exploring when I'm writing is what must be going on in a character's mind. Whenever I read great portal stories, I always try to put myself into the shoes of the character, to try to imagine how they must be feeling as they discover this passageway to a new world. How must Alice have been feeling as she fell through the never-ending tunnel into Wonderland?

First, think of your character – it's easier if you base this on someone you know.

- What are they called?
- What do they look like?
- What sort of a person are they (miserable/friendly/kind/aggressive)?
- What do they say?
- What do they do?
- How do they treat other people?
- How do other people treat them?

Now compose a short piece of descriptive writing based on seeing a mysterious door through the eyes of your character. To do this, we will use a simple opener to drop the reader straight into the action:

Samantha stared. ...

Ali hesitated. ...

We will also try to use some of the tools we explored in *The Snow Walker's Son*. Look at this example:

Samantha stared. There, rising out of the cliff, was an unfamiliar door; its metallic panels were tarnished in rust. Paint flaked off the brittle walls that made up its frame and the door handle rattled in the bitter breeze. Slowly, Samantha gazed all around her, took a deep breath and stepped forward.

Here are the tools I used:

<ul style="list-style-type: none"> Show the setting through the eyes of the main character (MC) 	Samantha stared.
<ul style="list-style-type: none"> Describe the door/portal. (You may like to use two sentences that are closely linked in meaning and connect them with a semicolon.) 	There, rising out of the cliff, was an unfamiliar door; its metallic panels were tarnished in rust.
<ul style="list-style-type: none"> Add some more detail. 	Paint flaked off the brittle walls that made up its frame and the door handle rattled in the bitter breeze.
<ul style="list-style-type: none"> Include an adverb to hint at how the MC feels. Remember, you can move the position within the sentence. 	Slowly,
<ul style="list-style-type: none"> Use the pattern of three to advance the action and inject a sense of pace into your writing. 	Samantha gazed all around her, took a deep breath and stepped forward.



★ Now Imagine your main character is walking along the road when they come across a mysterious doorway. Describe this through their eyes. Use my model above to help you.

Maths Activity 1a - ten in ten 😊

1. $7 + (8 \times 6)$

2. $\frac{3}{5} - \frac{3}{10}$

3. Write 0.7 as a fraction

4. $\frac{1}{3}$ of 21 = ____ - 10

5. Round 4.639 to 1dp

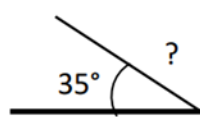
6. Find $\frac{2}{9}$ of 36

7. Which of these numbers is **prime**?

33 45 57 69 53 49

8. What is the difference between 6000 and 60?

9. What is the missing angle?



10. $0.73 + \underline{\quad} = 1$

You know the rule!

Ten minutes to answer ten questions 😊

Maths Activity 1b - Short multiplication

We have included Learning Reminders that will help you with answering today's questions.

Don't forget that you can also use your Maths revision book to help you.

Learning Reminder

Use short multiplication to multiply 4-digit numbers by 1-digit numbers.

2341

5372

4278

6143

3

5

4

8

Target 20,000

Decide which 4-digit number to multiply by a number card.

You are aiming for an answer as close to 20,000 as possible. You can use short multiplication or the grid method....

How close to 20,000 were you?

How did you decide which 4-digit number to use? Did rounding help?

Use short multiplication to multiply 4-digit amounts of money by single-digit numbers; Use rounding to approximate.



**Sony MDR-ZX100
Outdoor Headband
Headphones -
Black by Sony
(25 Mar 2011)**

£23.67

Roughly how much would it cost to buy 3 of these? Round to the nearest pound to estimate the cost.

3 x £23.67

x	£20	£3	60p	7p	
3	£60	£9	£1.80	21p	£71.01

$3 \times 60p = £1.80$

Add the pounds, and then the pence.

$$\begin{array}{r}
 \text{£ } 23.67 \\
 \times \quad 3 \\
 \hline
 122 \\
 \text{£ } 71.01
 \end{array}$$

$3 \times 60p + 20p = \text{£}2$

Maths Activity 1b ** and ***

** Money multiplication practice

Use a written method to calculate the answers, but watch out for a few where you could use a mental method instead.

1. $3 \times \text{£}5.28$

2. $5 \times \text{£}2.99$

3. $4 \times \text{£}5.79$

4. $4 \times \text{£}4.16$

5. $3 \times \text{£}2.63$

6. $8 \times \text{£}4.43$

7. $7 \times \text{£}5.87$

8. $3 \times \text{£}25.01$

9. $6 \times \text{£}46.14$

10. $4 \times \text{£}25.42$

11. $8 \times \text{£}63.54$

12. $5 \times \text{£}32.45$

13. $4 \times \text{£}11.11$

14. $8 \times \text{£}52.69$

15. $7 \times \text{£}86.74$

Challenge

Which will have a larger total? $\text{£}34.34 \times 4$ or $\text{£}43.43 \times 3$
Can you say before you work them out to check?
Were you correct?

*** Multiplying amounts of money

Choose a number from 3 to 9.

Choose one of these prices to multiply by your chosen single-digit number.

£45.19 £26.47 £53.28 £42.75

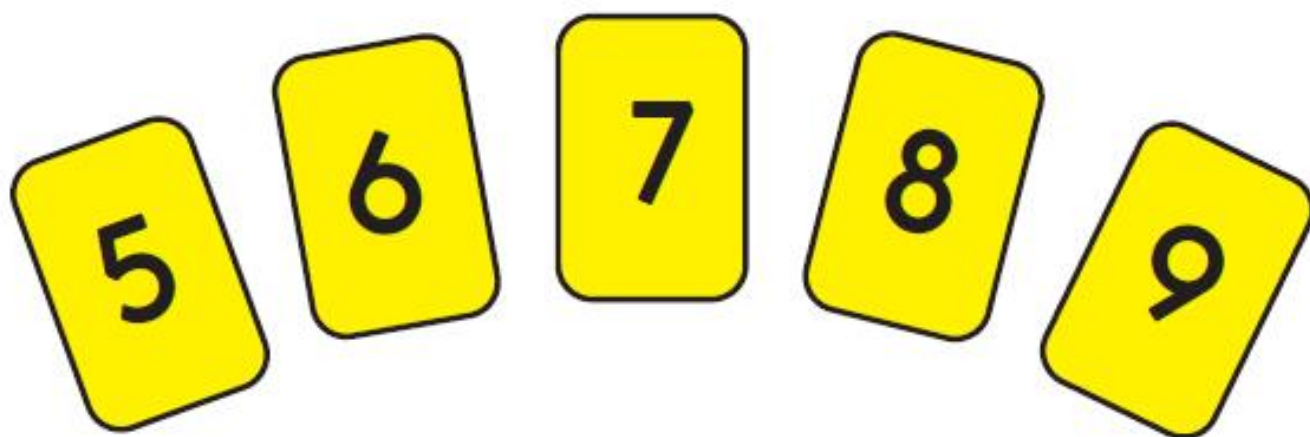
You are aiming for an answer as close to £200 as possible!

Repeat, with a different single-digit number each time.

Which answer was closest to £200?

Maths Activity 1c - Challenge

Investigation Aim for 60,000



Use the digits 5, 6, 7, 8 and 9 to create 4-digit by 1-digit multiplications.

$$\square\square\square\square \times \square$$

Aim for an answer as close to 60,000 as possible.

What will be your strategy to get started?

How will you keep track of combinations of digits you've tried?

A sheet of yellow lined paper with a spiral binding on the left. The first line is blank. The second line has the digits 5, 6, 7, 8, 9 written in blue ink. The third line has the multiplication 7965 x 8 written in blue ink. The remaining lines are blank.

Science - Inheritance

We are starting our next Science topic - Evolution and Inheritance. This first lesson explores inheritance. We will identify inherited characteristics that are passed on from parent to offspring and also explain how inherited characteristics can lead to variation.

There is a knowledge postcard below that will help with the key learning and understanding that you need this week.

Key Vocabulary	
offspring	The young animal or plant that is produced by the reproduction of that species.
inheritance	This is when characteristics are passed on to offspring from their parents.
variations	The differences between individuals within a species.
characteristics	The distinguishing features or qualities that are specific to a species.



Inherited Traits

Eye colour is an example of an **inherited trait**, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.



Offspring

Animals and plants produce **offspring** that are similar but not identical to them. **Offspring** often look like their parents because features are passed on.

Variation

In the same way that there is **variation** between parents and their **offspring**, you can see **variation** within any species, even plants.



Science Activity 1a - Inheritance - Key Vocabulary

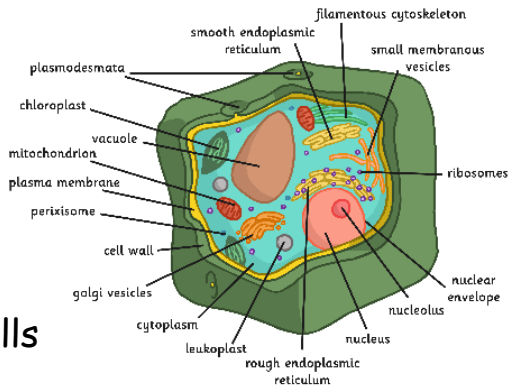
Write one or two concise sentences to explain the meaning of these words.

If you are unsure, think about similar words and what they mean to work out the meaning of the key words. You could use a dictionary to help if needed.

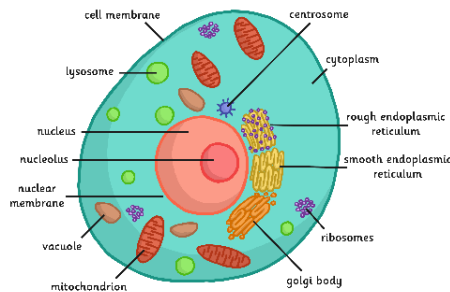
Key vocabulary	Definition
offspring	
inheritance	
adaptation	
variation	
environment	
chromosome	
DNA	
acquired	

Science - Inheritance - Cells, Chromosomes, DNA and Genes

While we will not be examining these in detail, it is helpful to know about the building blocks of life for this unit.

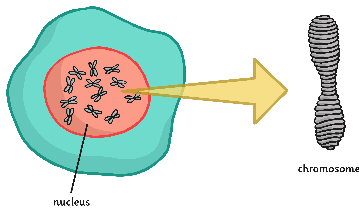


Cells



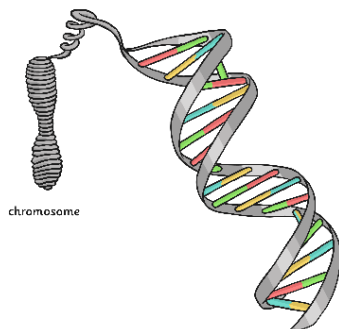
Cells are the building blocks of all living things. All living things are made up of cells. Amoebas have one cell. Humans have trillions of cells!

Chromosomes



The nucleus of a cell contains chromosomes, which are made up of DNA.

DNA



DNA carries the characteristics that we inherit. It can replicate and make copies of itself. When cells divide, each cell needs to have an exact copy of the DNA in the old cell.

Genes

Genes are short sections of DNA that contain specific information. This is often called the genetic code. All the genes in the whole cell are called the genome.

Science - Inheritance - Variation

What does variation mean?

A different or distinct form or version of something

What causes variation?

This can be caused by inherited or environmental factors.
Variation can also be continuous or discontinuous

Inheritance

These are characteristics that are passed on to offspring from their parents.



Adaptation

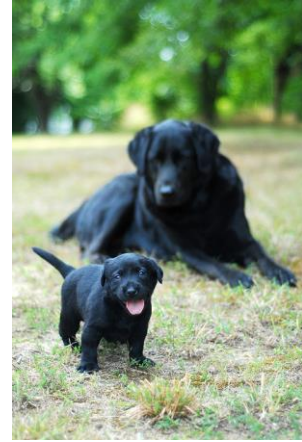
Over many generations, a species will adapt to its environment because the animals with the most successful characteristics are more likely to survive and pass on these characteristics to their offspring.



When we talk about inheritance, we often mean things that are passed on to us when one of our relatives or friends has died. Inherited items are sometimes houses or important objects.



In science, inheritance refers to the genes that are passed on from parents to offspring. When we refer to inherited characteristics we tend to focus on physical characteristics as these are easy to spot but inherited characteristics include abilities such as taste and smell.



Science Activity 1b - Inheritance - Parents and Offspring

Match the parent with its offspring.



How did you match the parents and offspring?
What are the inherited characteristics that you could see?

Science - Inherited characteristics

How can inherited characteristics (similarities between parent and offspring) result in variation (differences)?

Well the majority of living things are the result of reproduction so they have two parents. You inherit the characteristics from both parents but the way they combine makes the offspring unique.



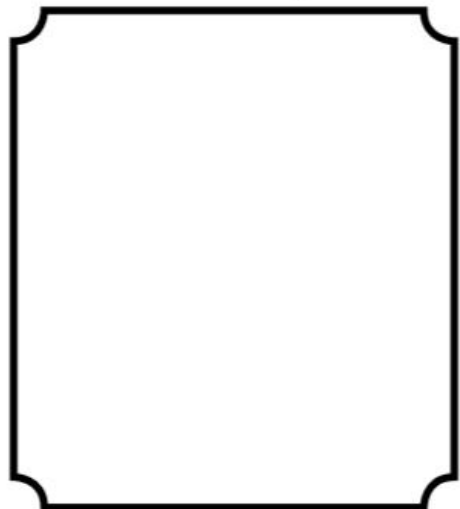
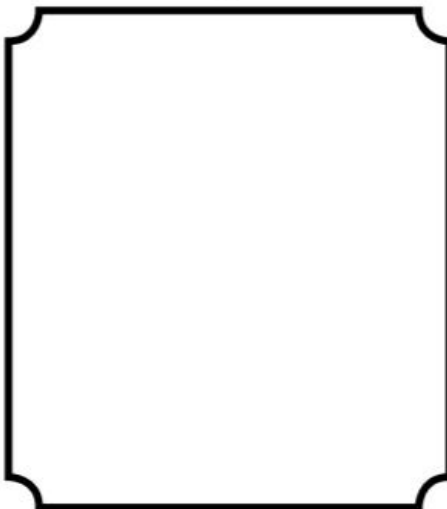
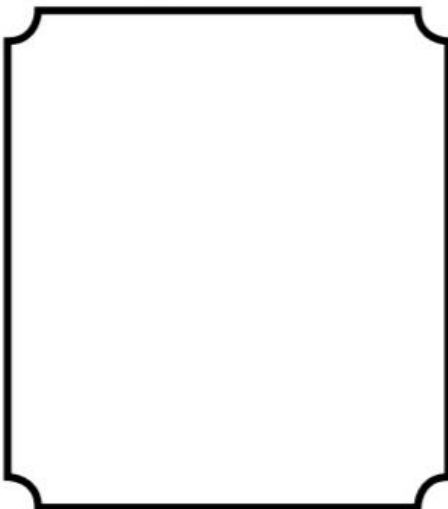
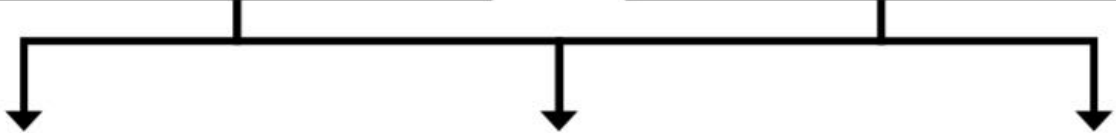
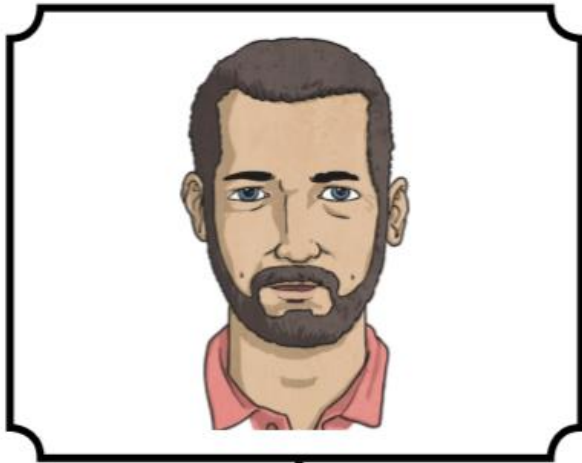
The inherited characteristics can combine in different ways, which is the reason why siblings inherit the same characteristics but are not identical to each other.

Even identical twins that share the exact same combination of DNA are not 100% the same! This is due to the fact that genes develop separately when the twins are embryos or during later development.

How Might Offspring Vary?

While all siblings may share both parents and inherit the same characteristics, it does not mean that they are identical. There are many ways that the inherited characteristics can combine which explains why there is such variation.

Look at the parents below and then draw three different combinations of inherited characteristics. Remember to use characteristics from both parents!



Inherited Characteristics from Mum:

Inherited Characteristics from Mum:

Inherited Characteristics from Mum:

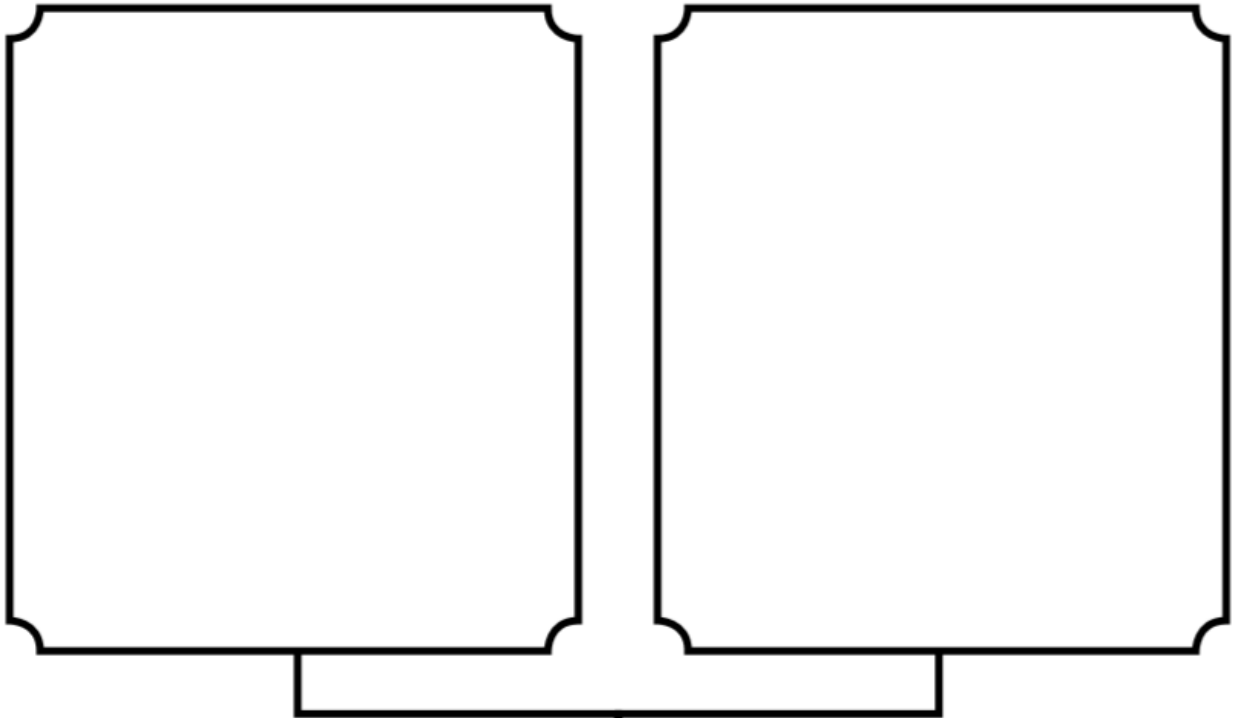
Inherited Characteristics from Dad:

Inherited Characteristics from Dad:

Inherited Characteristics from Dad:

Science Activity 1d - Inheritance - Investigating inheritance

Choose a member of your family, preferably someone that you have photos of their parents to closely examine and investigate the characteristics they have inherited from their parents. You could even use yourself and your parents! Put the photos in the boxes or draw a picture of each person. Write down the characteristics the offspring have inherited from their parents.



Inherited:

Inherited:

Science Activity 1e- Inherited or acquired characteristics

We often talk about inheriting characteristics from our parents. However, it is not always the case that these are passed on through DNA. Some are learnt up (or acquired) as we grow.

Using the Inherited Characteristics Card below, place the characteristics into these two groups.

Inherited Characteristics

Acquired Characteristics

How do you know if the characteristic is inherited or acquired?



Skin colour



Hair colour



Drawing



Playing a musical instrument



Swimming



Cleft chin



Eye Colour



Singing



Riding a bike



Dimples

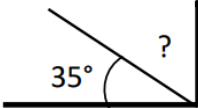


Reading



Freckles

ANSWERS Maths Activity 1a - ten in ten 😊

1. $7 + (8 \times 6)$	55
2. $\frac{3}{5} - \frac{3}{10}$	$\frac{3}{10}$
3. Write 0.7 as a fraction	$\frac{7}{10}$
4. $\frac{1}{3}$ of 21 = ___ - 10	17
5. Round 4.639 to 1dp	4.6
6. Find $\frac{2}{9}$ of 36	8
7. Which of these numbers is prime ? 33 45 57 69 53 49	53
8. What is the difference between 6000 and 60?	5940
9. What is the missing angle? 	55°
10. $0.73 + \underline{\quad} = 1$	0.27

ANSWERS Maths Activity 1b ** and ***

Practice Sheet Answers

Money multiplication practice **

1. $3 \times \text{£}5.28 = \text{£}15.84$
2. $5 \times \text{£}2.99 = \text{£}14.95$
3. $4 \times \text{£}5.79 = \text{£}23.16$
4. $4 \times \text{£}4.16 = \text{£}16.64$
5. $3 \times \text{£}2.63 = \text{£}7.89$
6. $8 \times \text{£}4.43 = \text{£}35.44$
7. $7 \times \text{£}5.87 = \text{£}41.09$
8. $3 \times \text{£}25.01 = \text{£}75.03$
9. $6 \times \text{£}46.14 = \text{£}276.84$
10. $4 \times \text{£}25.42 = \text{£}101.68$
11. $8 \times \text{£}63.54 = \text{£}508.32$
12. $5 \times \text{£}32.45 = \text{£}162.25$
13. $4 \times \text{£}11.11 = \text{£}44.44$
14. $8 \times \text{£}52.69 = \text{£}421.52$
15. $7 \times \text{£}86.74 = \text{£}607.18$

Challenge

$4 \times \text{£}34.34 = \text{£}137.36$ and $3 \times \text{£}43.43 = \text{£}130.29$ so the first is larger.

Multiplying amounts of money ***

e.g. $8 \times \text{£}26.47 = \text{£}211.76$

Can you get an answer closer to $\text{£}200$?

ANSWERS Maths Activity 1c - Challenge

- $7 \times 8569 = 59983$ is the closest you can get

ANSWERS Science Activity 1a - Inheritance - Key Vocabulary

Write one or two concise sentences to explain the meaning of these words.

If you are unsure, think about similar words and what they mean to work out the meaning of the key words. You could use a dictionary to help if needed.

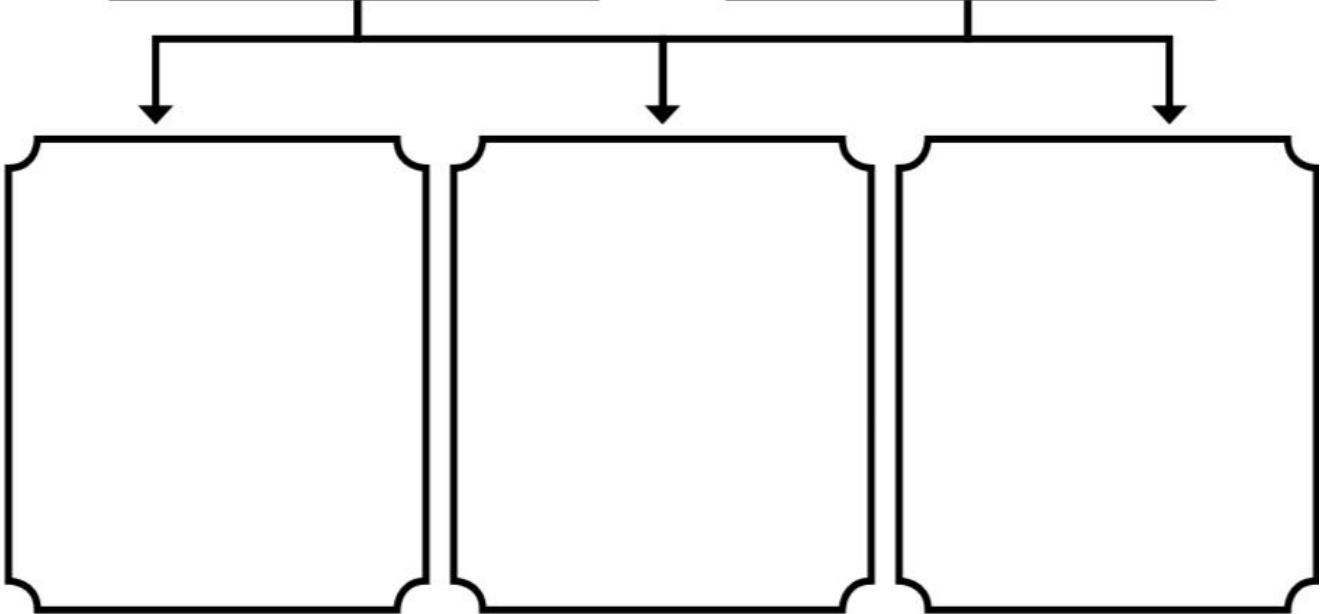
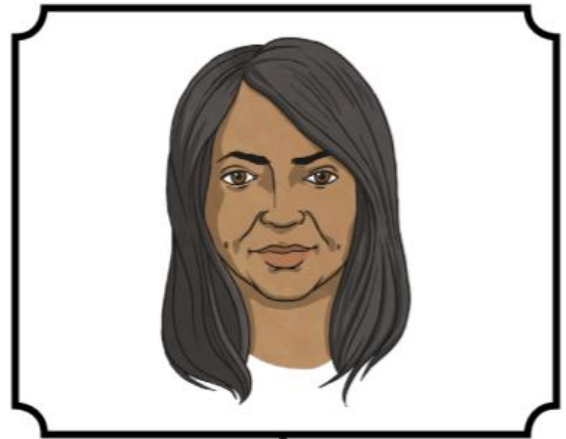
Key vocabulary	Definition
offspring	A young, plant or animal that is produced by the reproduction of that species
inheritance	a thing (such as a characteristic) that is inherited or passed on to offspring from their parents
adaptation	the action or process of adapting or being adapted; the process of change by which an organism or species becomes better suited to its environment
variation	the differences between individuals within a species
environment	the surroundings or conditions in which a person, animal, or plant lives or operates.
chromosome	a threadlike structure found in the nucleus of most living cells, carrying genetic information in the form of genes
DNA	a self-replicating material which is present in nearly all living organisms as the main part of chromosomes. It is the carrier of genetic information.
acquired	buy or obtain something for yourself

ANSWERS Science Activity 1c - Inheritance -How might offspring vary?

How Offspring Might Vary **Answers**

While all siblings may share both parents and inherit the same characteristics, it does not mean that they are identical. There are many ways that the inherited characteristics can combine which explains why there is such variation.

Look at the parents below and then draw three different combinations of inherited characteristics. Remember to use characteristics from both parents!



Inherited Characteristics from Mum:

Brown Eyes

Inherited Characteristics from Mum:

Round face

Inherited Characteristics from Mum:

Darker skin

Inherited Characteristics from Dad:

Paler skin

Inherited Characteristics from Dad:

Blue eyes

Inherited Characteristics from Dad:

Oval face

ANSWERS Science Activity 1e- Inherited or acquired characteristics

Inherited Characteristics

Acquired Characteristics

