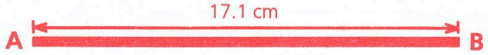
Week 11

Week 11 Day 1: Mental Maths … remember to use jottings

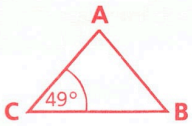
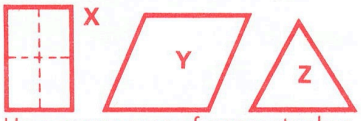
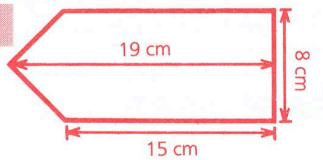
A

		ANSWER
1	Write in figures $\frac{1}{10}$ of 1 million.	
2	85 g × 100 = ▢ kg	kg
3	1.06 − 0.79	
4	480 mm = ▢ m	m
5	$\frac{5}{6}$ of 30p	p
6	905 ÷ 100	
7	(a) 1% of £3·00 = ▢ p	(a) p
	(b) 9% of £3·00 = ▢ p	(b) p
8	£0·04 × 50	£
9	$\frac{3}{4}$ h + 35 min = ▢ h ▢ min	h min
10	2.650 litres = ▢ mℓ	mℓ
11	19p + 7p + 5p + 8p = £▢	£
12	$1\frac{3}{4} \times 8$	

B

		ANSWER
1	Write as a decimal the sum of 9 tenths and 37 thousandths.	
2	Find the two missing numbers in this series. 70, 7, ▢, 0.07, ▢	
3	What is the average of 15 cm, $\frac{1}{4}$ m and 17 cm?	cm
4	Increase £7·50 by 10%.	£
5	By how many twelfths is $1\frac{5}{6}$ less than $2\frac{1}{4}$?	
6	Write in 24-hour clock times	
	(a) 18 min before noon	(a)
	(b) $\frac{1}{2}$ h after 7.57 p.m.	(b)
7	Find the difference between $\frac{1}{5}$ of 25 and $\frac{1}{3}$ of 45.	
8	5% of a sum of money is £0·40. Find the whole amount.	£
9	Approximate	
	(a) 10.250 litres to the nearest litre	(a) ℓ
	(b) £439·87 to the nearest £.	(b) £
10	 Find in mm the length of a line 15 mm shorter than AB.	mm
11	What is the cost of 800 g at 90p per kg?	p
12	The area of a rectangle is $66\frac{1}{2}$ cm². The width of the rectangle is 7 cm. Find its length.	cm

C

		ANSWER
1	Write in words the number which is equal to $(3 \times 10^3) + (6 \times 10^2)$.	
2	There are 60 cards in a packet. There are 12 packets and 17 odd cards. How many cards are there altogether?	
3	A bill for £4·23 is paid with a £5 note. Name the four coins given as change.	p p p p
4	 ABC is an isosceles triangle. Find the angle at B	°
	the angle at A.	°
5	1 litre of water has the same volume as 1000 cm³. What are the volumes in cm³ of (a) 200 mℓ	(a) cm³
	(b) 1.7 ℓ?	(b) cm³
6	A plank of wood 7.5 m long is cut into two parts so that one part is four times as long as the other. Find the length of each part.	m m
7	**TRAIN TIMES** A: Depart 10.45, Arrive 12.35 B: Depart 16.18, Arrive 18.00 Which train, A or B, is the quicker and by how many minutes?	by min
8	The total mass of 12 parcels of equal mass is 5.4 kg. Find the mass of	
	(a) 4 parcels in kg and g	(a) kg g
	(b) 1 parcel in g.	(b) g
9	 The rectangle X has two axes of symmetry. How many axes of symmetry has	
	(a) the rhombus Y	(a)
	(b) the equilateral triangle Z?	(b)
10	The circumference of a wheel is 45 cm. How many times will it turn in going 450 m?	
11	By how much is it cheaper to pay for an article priced at £25 with a discount of 10%, than a discount of 8p in the £?	p
12	 Find the area of the shape.	cm²

Section 2 Test 1

A

		ANSWER
1	7 + 33 + 9	
2	814 ÷ 2	
3	(19 + 5) − (7 + 8)	
4	$1\frac{1}{4}$ m = ▒ mm	mm
5	1 minute = ▒ seconds	s
6	9 + 9 + 9 + 9	
7	$\frac{3}{5}$ = ▒ tenths	10
8	34p × 6 = £▒	£
9	From 10.14 a.m. to noon = ▒ h ▒ min	h min
10	1 FIFTY − *y*p = 17p. Find the value of *y* in pence.	p
11	8^2 = 50 + ▒	
12	61 ÷ 8 = ▒ rem. ▒	rem.

B

		ANSWER
1	Write in figures nine thousand seven hundred and nine.	
2	There is 69p change from £2. How much has been spent?	£
3	Write 1700 g to the nearest kg.	kg
4	Divide £2·94 by 6.	p
5	Take 6 plus 5 from the total of 8 and 17.	
6	How many seconds in (a) $\frac{1}{2}$ min (b) $1\frac{1}{4}$ min?	(a) s (b) s
7	Find the sum of the odd numbers between 56 and 60.	
8	Which 2 coins must be added to a FIVE and 3 TWOS to make 23p?	p p
9	Find the cost of $2\frac{1}{2}$ kg at 28p per kg.	p
10	What must be added to 5 plus 80 to equal 5 multiplied by 80?	
11	If 2 ℓ cost 48p, find the cost of $\frac{1}{4}$ ℓ.	p
12	Find $\frac{1}{6}$ of 84.	

C

		ANSWER
1	▒▒▒▒□□□□□□ Write as a decimal fraction (a) the shaded part (b) the unshaded part.	(a) (b)
2	A plane flew 2400 km at a speed of 800 km/h. How long did the journey take?	h
3	How many 600-mℓ bottles can be filled from 6 ℓ?	
4	Gary had £1. He spent 18p on nuts and 42p on bus fares. How much had he left?	p
5	■ The perimeter of this square is 60 mm. Find the length of one side.	mm
6	Tony has 28p and his sister has 4 times as much. How much have they altogether?	£
7	1 TWENTY 2 TENS 8 FIVES 10 TWOS. Tim exchanged these coins for FIFTIES. How many FIFTIES did he get?	FIFTIES
8	The first day of Adrian's holiday was June 29th and he returned to school on August 3rd. For how many days was he on holiday?	
9	Susan $\frac{1}{3}$ · Shahid $\frac{1}{2}$ · Jim $\frac{1}{6}$. The diagram shows how the children shared £4·20. How much did each receive?	Susan £ Shahid £ Jim £
10	The sum of 3 numbers is 94. Two of the numbers are 36 and 35. What is the third number?	
11	How many weeks will it take Chen to save £5·00 if he saves 25p each week?	
12	36 54 64 72. Which two of these numbers can be divided by both 4 and 9 without a remainder?	

Spellings- Week 11

Go to the following link:
https://www.ictgames.com/mobilePage/literacy.html

Select- Look, Cover, Write, Check game

Click Yrs 5&6

Click the patterns tab.

Select you word list and click on go!

Week 11 practise spelling - ation words

Comprehension Questions To Support The Teaching of Holes By Louis Sachar

Read Chapters 23-25

1. What used to happen at the town picnic in Green Lake?

2. What was Katherine Barlow famous for at the time?

3. How did Charles Walker come to earn the nickname 'Trout'?

4. Why did so many men attend Katherine Barlow's classes?

5. Why did everyone expect Katherine Barlow to marry Trout?

6. Why was Trout surprised by Kate's rejection?

7. What kind of a person do you think Kate Barlow was? Why?

8. Why does Mr Sir become so angry?

9. Why does Stanley concentrate extra hard on his work that day?

10. How does Mr Sir punish Stanley?

11. How does Sam explain the donkey's old age?

What does Doc Hawthorn use Sam's onions for?

Why is Sam not allowed to attend classes?

12. How does Kate manage to spend more time with Sam?

13. What, do you think, does Hattie Parker mean when she says that God will punish Kate and Sam?

Topic Tasks- Week 11

This is Sport's Day week. Every day there will be a fitness challenge video posted on the school Facebook page. Have a go and sent us in some pictures of you in action.

Our topic will centre around the theme of the "Human Body." Below is a list of the activities that have been included.

- The human skeleton labelling task
- Match and label the human organs
- Label the parts of the heart and lungs
- Make a model lung
- Heart rate graph work and experiment.

Karaoke Challenge

Can you learn the following songs:

1) The Skeleton Song by Mr. Parr

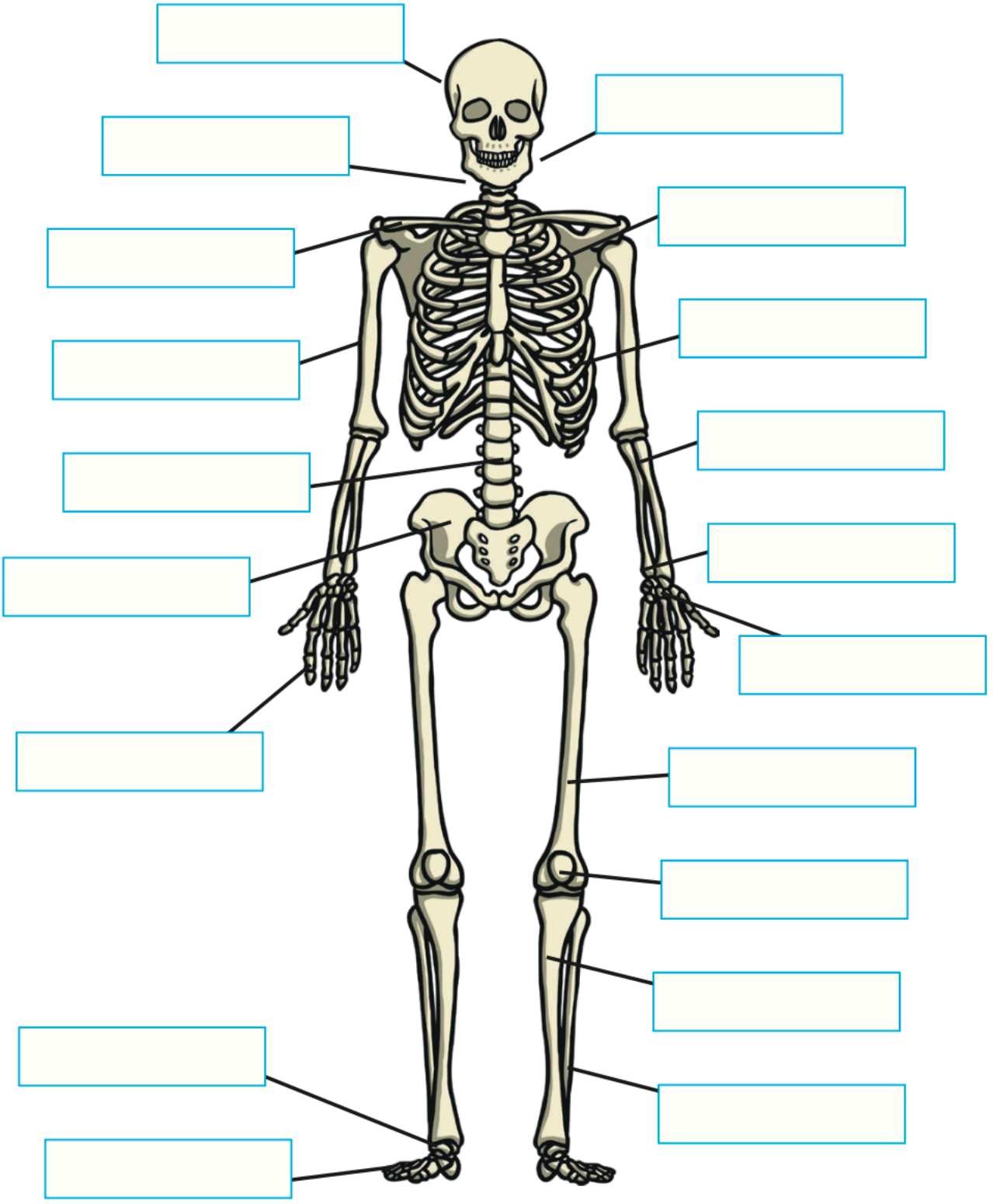
https://www.youtube.com/watch?v=uzxmKAWiN_U&list=PLSQwifbcqgeut7SkQW4DhuxINRAja5PU2&index=4&t=0s

2) The respiratory System Song by Mr. Parr

https://www.youtube.com/watch?v=p4zOXOM6wgE&list=PLSQwifbcqgeut7SkQW4DhuxINRAja5PU2&index=2

Please send me any pictures or video clips of you singing along

The Human Skeleton



The Human Skeleton

Cranium

Cervical Vertebrae

Clavicle

Humerus

Vertebral Column

Pelvis

Phalanges

Talus

Metatarsals

Fibula

Mandible

Sternum

Thoracic Cage

Radius

Ulna

Carpal

Femur

Patella

Tibia

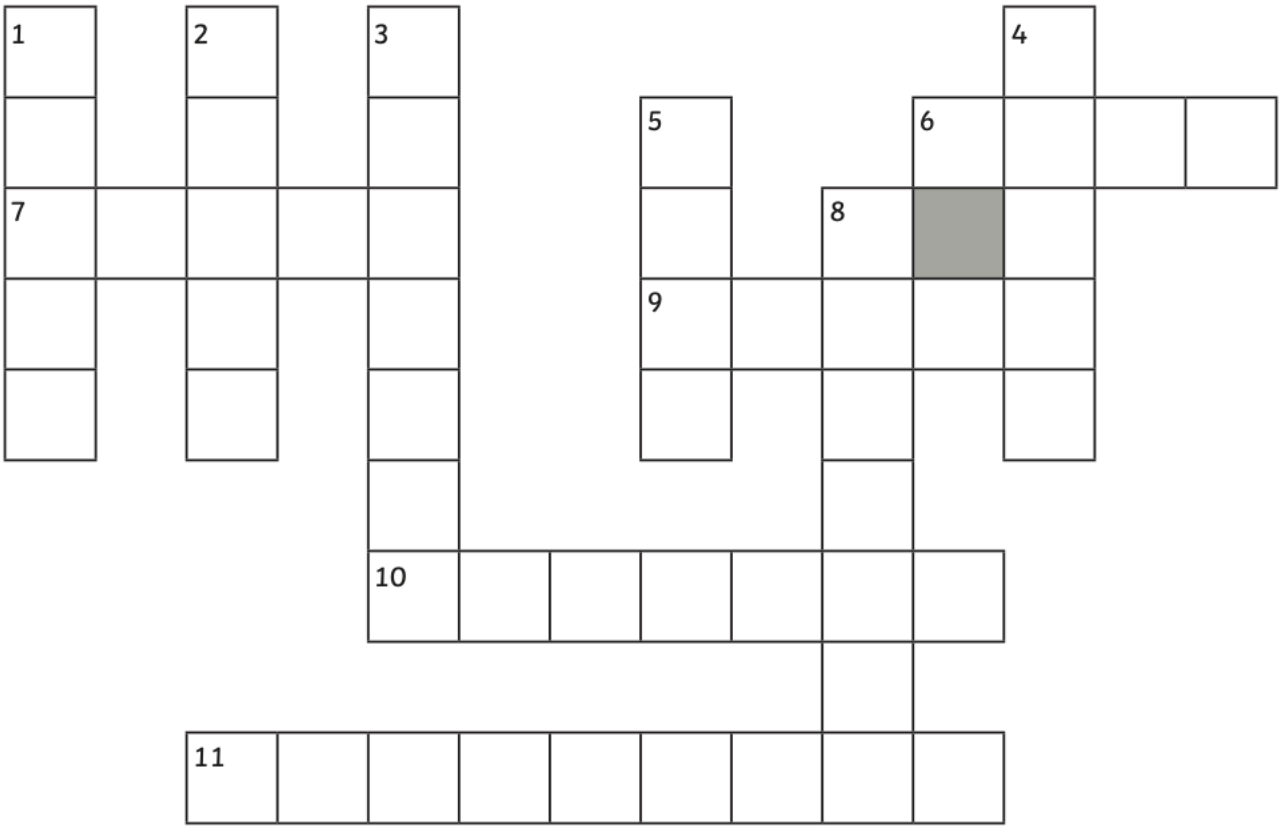
Human Skeleton

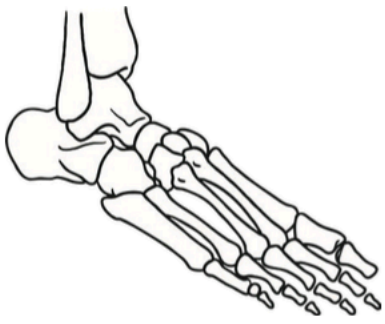
Amazing Fact

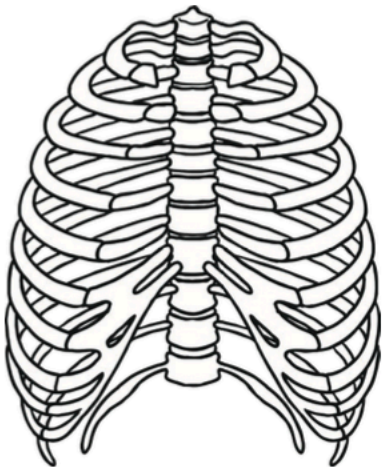
One-quarter of your bones are in your feet!

Challenge

Learn about the different bones in the human skeleton by completing the crossword clues.







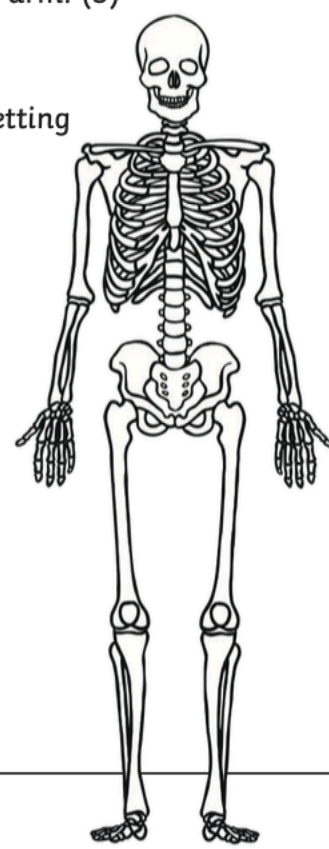
Human Skeleton

Across

6. Our skeleton allows us to do this. (4)
7. The skeleton is made up of many of these. (5)
9. Which important organ does the skull protect? (5)
10. Medical name for the shoulder blade. (7)
11. The small bones that form the backbone. (8)

Down

1. The common name of the joint between the upper and lower arm. (5)
2. A type of of joint. (5)
3. These are attached to bones and allow bones to move by getting shorter and longer. (7)
4. The name for where bones meet. (5)
5. Bones which protect the heart and lungs. (4)
8. Medical name for the knee bone. (7)



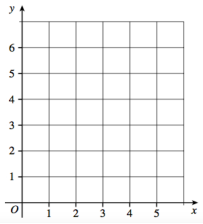
You could also try to find out:

- how many bones you have altogether;
- how the number of bones changes as you get older;
- which human bone is most often broken;
- how the skeletons of other mammals compare to human skeletons.

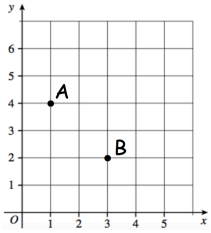
Week 11 Day 2: Co-ordinates Watch video 13 and complete task.

1. **A** is the point (5, 3)
   B is the point (0, 2)

   Plot the points ***A*** and **B** on the grid



2. The points **A** and **B** are shown on the grid.



   Write the coordinates of point ***A***

   (,)

   Write the coordinates of point **B**

   (,)

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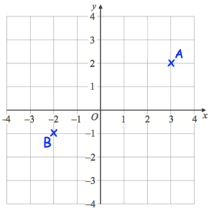
3. The points **A** and **B** are shown on the grid.



   Write the coordinates of point ***A***

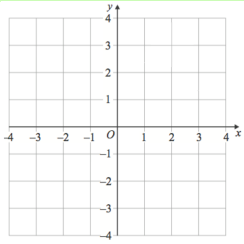
   (,)

   Write the coordinates of point **B**

   (,)

4. **A** is the point (2, –3)
   B is the point (–4, 1)

   Plot the points ***A*** and **B** on the grid



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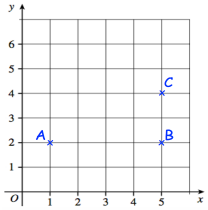
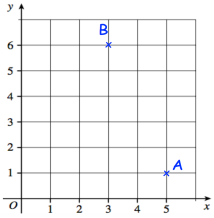
5. **A**, **B**, **C** and **D** are the vertices of a rectangle.



   Write the coordinates of point **D**

   (,)

6. **A**, **B** and **C** are the vertices of an isosceles triangle.



   Write the coordinates of point ***C***

   (,)

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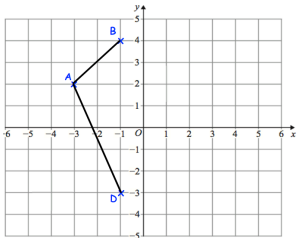
7. **A**, **B**, **C** and **D** are the vertices of a kite.

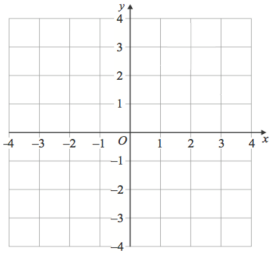


   Write the coordinates of point ***C***

   (,)

8. The vertices of a quadrilateral have these coordinates.

   (3, –2) (1, –2) (3, 1) (–1, 1)



   Complete the quadrilateral

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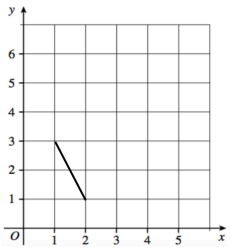
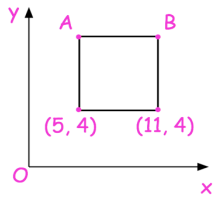
9. Here is one side of a square drawn on a coordinate grid.



The square has a vertex at (3, 4)

Draw the other three sides of the square on the grid

10. Here is a square on coordinate axes



Not to scale

Write the coordinates of points **A** and **B**

A = (,)

B = (,)

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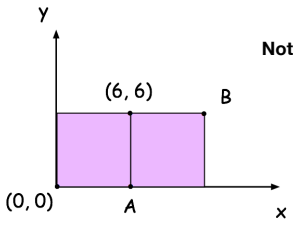
11. The diagram shows two identical squares.



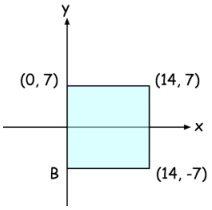
Not to scale

Write the coordinates of points **A** and **B**

A = (,)

B = (,)

12. The diagram shows a square on coordinate axes.



Not to scale

Write the coordinates of point **B**

(,)

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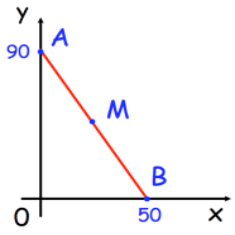
13. In this diagram **M** is an equal distance from **A** and **B**

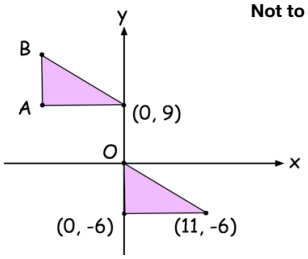


Not to scale

What are the coordinates of **M**?

(,)

14. Here are two identical triangles.



Not to scale

Write the coordinates of points **A** and **B**

A = (,)

B = (,)

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Interview notes

- Use these prompt notes to help you frame information for your character's speech.

Reporters ask the five 'W' questions to get key information: who, what, when, where, why?
The notes here have been completed for Hattie Parker.

Who? *Hattie Parker*

What? *enraged at seeing the Negro onion seller Sam kissing the schoolteacher Katherine Barlow*

When? *on a rainy day at the end of the first school semester*

Where? *outside the schoolhouse, as she stepped from the general store*

Why? *because she believes it is a sin against God for a Negro man and white woman to kiss*

Notes on character:

- Use this box to write notes on your character, fleshing out with more detail from your imagination.

Hattie Parker – lives alone; single; has always lived at Green Lake; keeps herself and her house very spick and span; is the neighbourhood gossip; has old-fashioned and racist views.

Kate Barlow becomes Kissin' Kate Barlow

110 years ago, Kate Barlow went through a significant change in her life. What was this change?

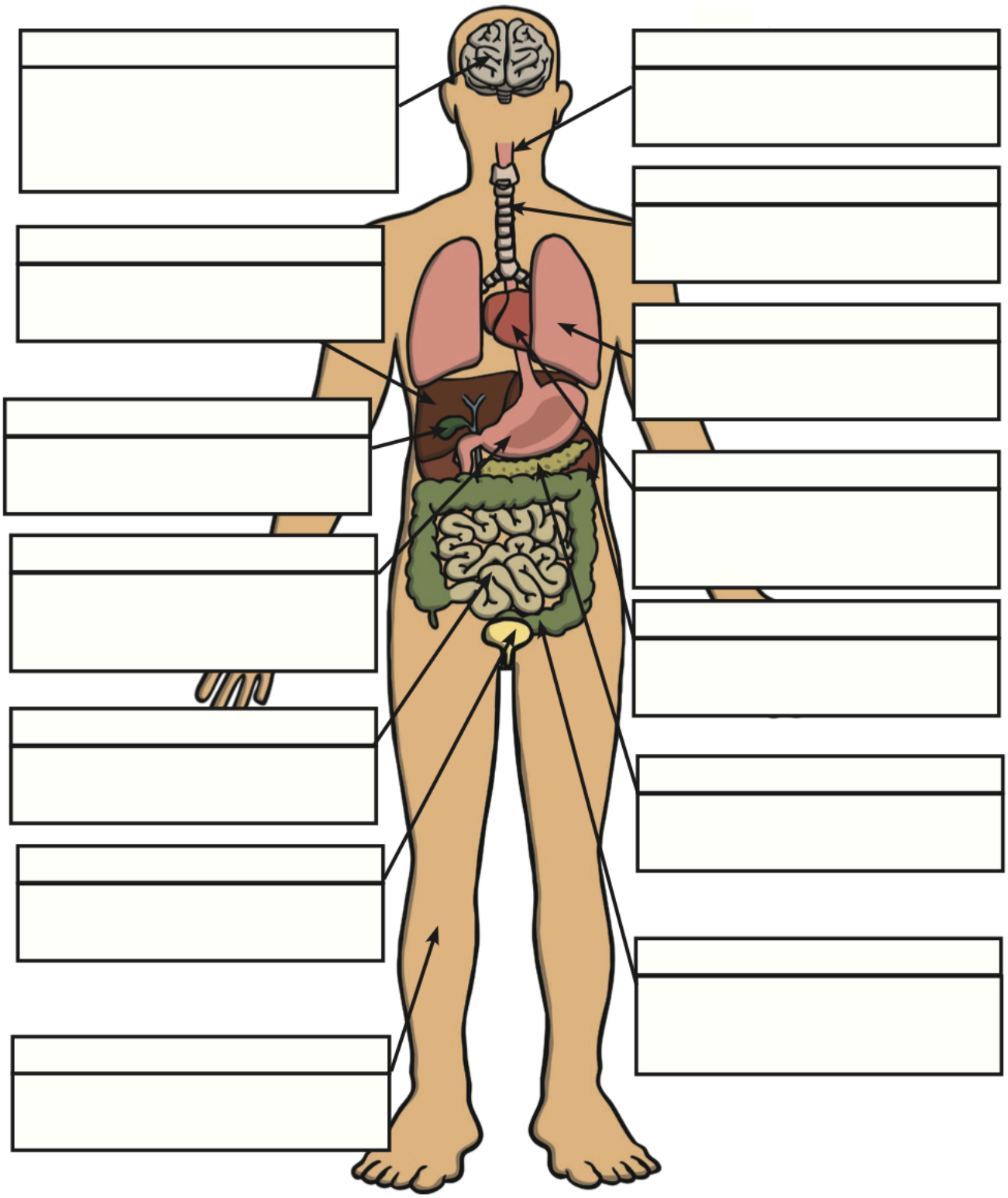
Why did this change happen?

You now know that 110 years ago different communities were segregated in the USA. If Kate had not fled Green Lake, what else could have happened to her?

Draw Kate Barlow the teacher from 110 years ago. Think carefully about her clothing, hair and where your drawing should be set.	**Draw Kissin' Kate Barlow as the outlaw 110 years ago.** Think carefully about her clothing, hair and where she now might be

Human Organ Matching and Labelling

Cut out the organ names and descriptions and stick them down in the correct boxes on the diagram.



Maintains body temperature using sweat and goosebumps.	oesophagus
Controls all of our necessary bodily functions, sends the impulses which allow us to move and enables you to think and learn.	bladder
Pumps oxygenated blood around your body and receives de-oxygenated blood back.	liver
Filters water and salt out of your blood and creates urine.	large intestine
Makes bile for digestion, filters out toxins and regulates blood sugar.	gall bladder
Produces enzymes necessary for digestion.	kidneys
Digests food using enzymes and absorbs nutrients for the blood.	stomach
Continues the digestion process, absorbs as much water as possible and expels excess fibre and waste.	heart
Stores and concentrates bile produced by the liver.	pancreas
Takes in oxygen, which reaches the blood via the heart.	lungs
Stores urine so that we can decide when we want to go to the toilet.	small intestine
Transports food and drink from the mouth to the stomach.	trachea
Receives food from the oesophagus and begins to break it down with digestive juices (enzymes).	skin
Transports air from the nose and mouth to the lungs.	brain

Plotting coordinates in the first quadrant

1 Plot the following points on the grid.

A at (2,3)

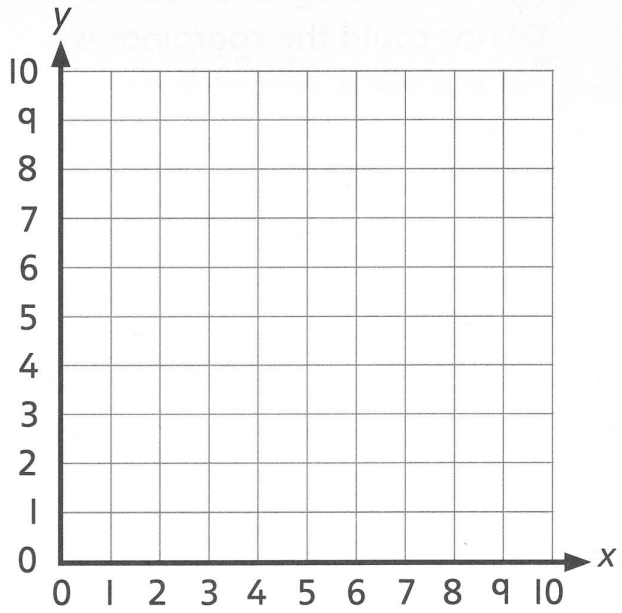
B at (8,1)

C at (5,7)

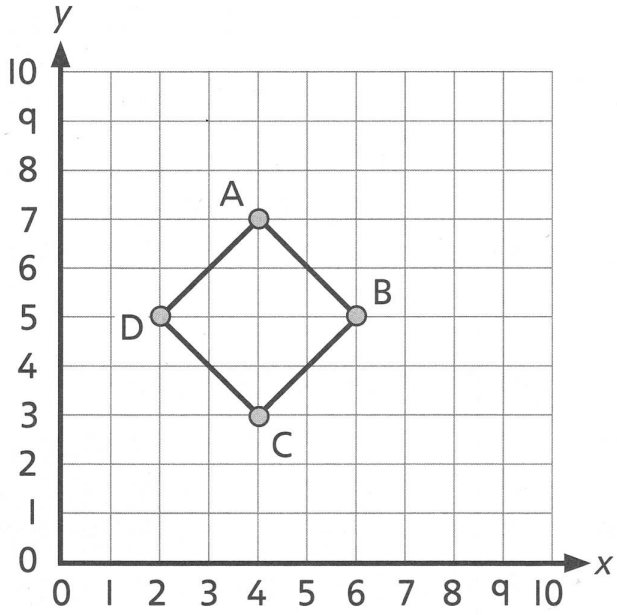
D at (0,4)

E at (7,0)

F at (3·5,6)



2 Write the coordinates of all the points.

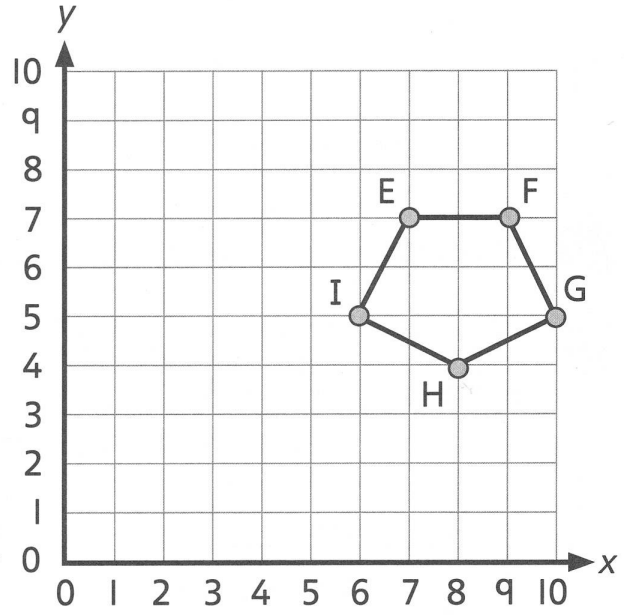


A (☐ , ☐)

B (☐ , ☐)

C (☐ , ☐)

D (☐ , ☐)



E (☐ , ☐)

F (☐ , ☐)

G (☐ , ☐)

H (☐ , ☐)

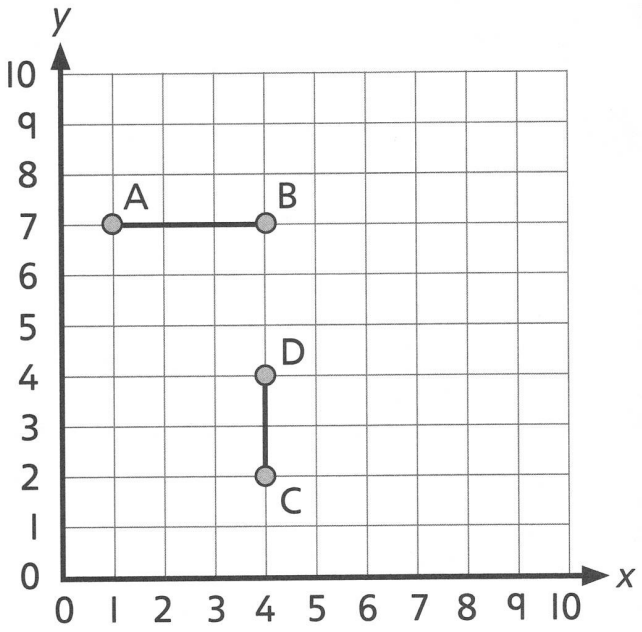
I (☐ , ☐)

3 **a)** Line AB is part of a square.

What could the coordinates of the other two vertices of this square be?

(☐ , ☐)

(☐ , ☐)



b) CD is the width of a rectangle. The length of the rectangle is twice the width. What could the coordinates of the other two vertices be?

(☐ , ☐)

(☐ , ☐)

4 The line shown is one side of a square.

a) Draw the rest of the square.

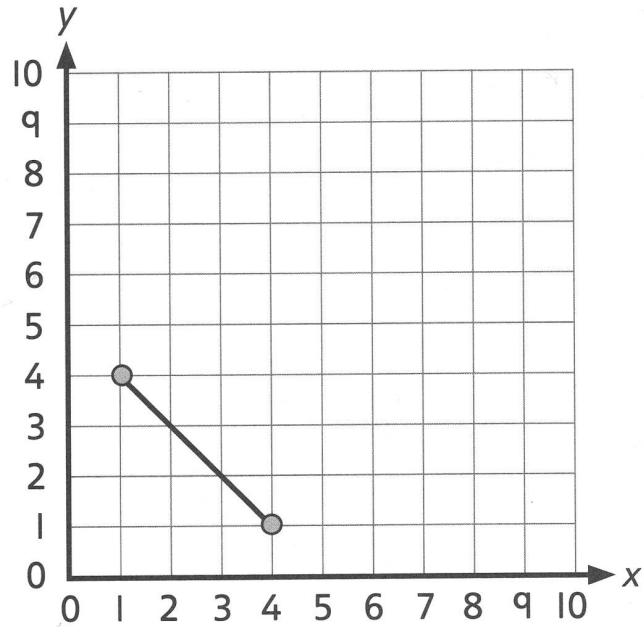
b) What are the coordinates of the vertices of the square?

(☐ , ☐)

(☐ , ☐)

(☐ , ☐)

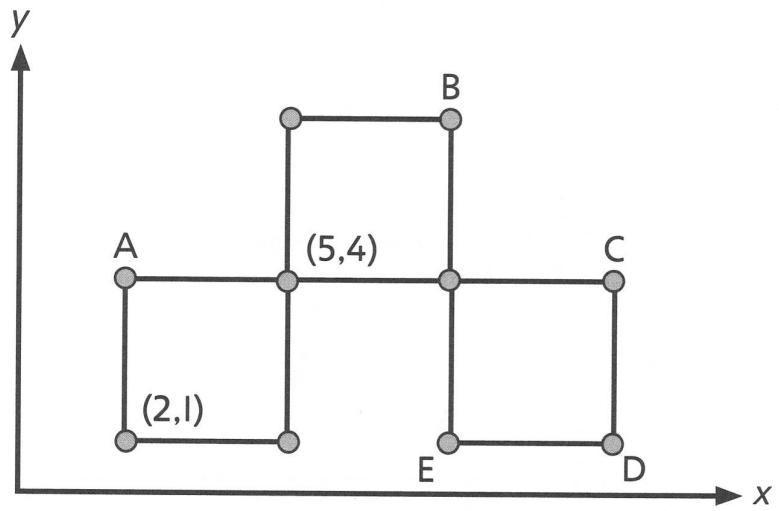
(☐ , ☐)



CHALLENGE

5 The sides of the three squares are all the same length.

Work out the coordinates of points A, B, C, D and E.



The coordinates of the points are:

Point A (☐ , ☐)

Point B (☐ , ☐)

Point C (☐ , ☐)

Point D (☐ , ☐)

Point E (☐ , ☐)

Reflect

If one of the coordinates of a point is 0, what does it tell you about the point?

Comprehension Questions To Support The Teaching of Holes By Louis Sachar

Read Chapters 26-27

1. Why do the children stop attending school in Green Lake?

2. How does the sheriff intend to punish Sam?

3. What sort of person do you think the sheriff is? Why?

4. Why is Trout's boat able to catch up with Sam's boat so easily?

5. Why do you think Katherine Barlow does not wish to be rescued?

6. What effect does the town's mistreatment of Katherine have on her? Explain.

7. How do the other boys react when they realize Zero has been digging Stanley's hole?

8. What kindness does Mr Pendanski show Stanley?

9. Where does Mr Sir go after he fills Stanley's canteen?

10. Would you take a drink from the canteen, if you were Stanley? Why/Why not?

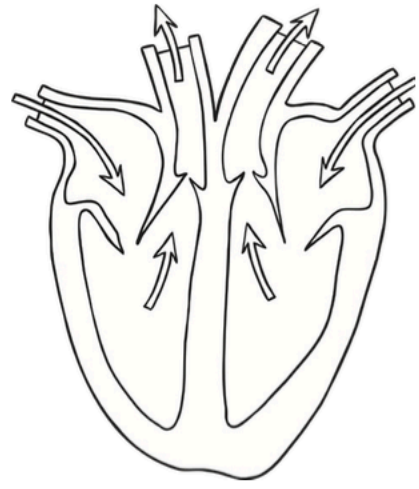
11. What is the first word that Stanley teaches Zero to write? Do you think this is an important word for Zero to learn? Why/Why not?

12. What is Zero's real name?

Your Heart

The heart is a muscle in your chest made up of four chambers:

- the right atrium;
- the left atrium;
- the right ventricle;
- the left ventricle.



Your heart is protected by your ribs and pumps blood around your body. This is what happens:

Your blood 'picks up' the oxygen from your lungs and then it travels to your heart. The heart pumps or pushes the blood around your body by using the muscles in its walls. These muscles contract to push the blood around the body. Arteries carry the blood to every part of your body so your muscles and organs can use the food and oxygen to make them work. Veins carry blood back to your heart when all the oxygen has been used so the blood can be pumped back to your lungs again to 'pick up' more oxygen.

Task 1: Complete the following paragraph using the paragraph above to help you.

The heart is a _____in your chest made up of _____chambers. The heart is protected by the _____. The heart acts like a _____ pushing blood around the body. This happens because the muscles in the _____ of the heart regularly contract, squeezing out the blood. Blood travels away from the heart in blood vessels called _____ and travels to _____ part of your body. The blood travels through _____ to return to the heart. Blood collects _____ from the lungs then returns to the heart to begin the cycle again.

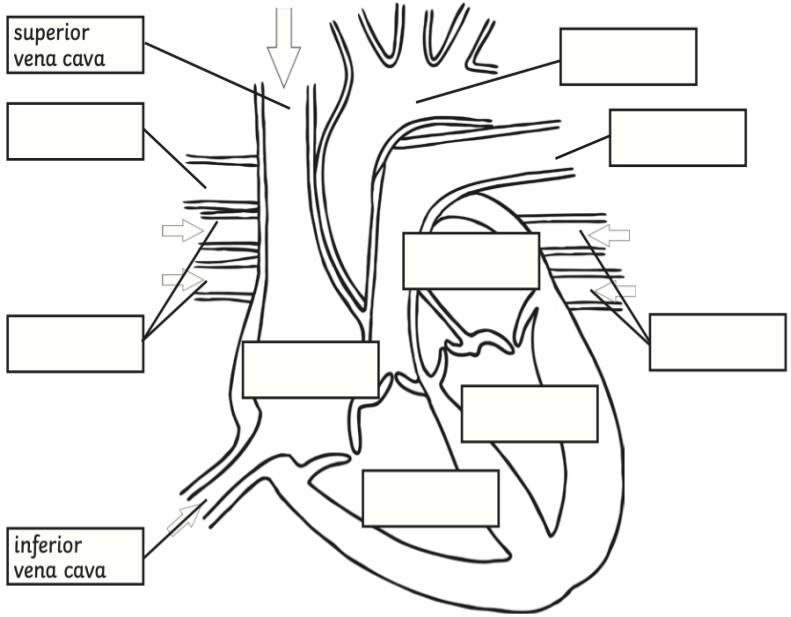
Task 2: Put a tick or a cross next to each of the following statements to show whether they are good or bad for your heart:

1) Walking to the shops ☐
2) Eating lots of sweets ☐
3) Eating fruits and vegetables ☐
4) Playing football ☐
5) Driving to the shops ☐
6) Sitting and watching TV ☐
7) Walking the dog ☐
8) Drinking lots of water ☐
9) Going for a bike ride ☐
10) Playing computer games ☐

Animals Including Humans

Label the parts of the heart. Use the words from the word bank to help you.

pulmonary artery (left)	aorta	right ventricle
pulmonary artery (right)	left atrium	right atrium
right pulmonary veins	left ventricle	aortic valve
left pulmonary veins		



Draw a line from each word to its function.

veins	To carry blood **away** from the heart either to the lungs to be reoxygenated or to the rest of the body.
capillaries	To carry blood **to** the heart either from capillaries to be pumped to the lungs to be reoxygenated or from the lungs to be pumped around the body again.
arteries	To allow for the exchange of oxygen and carbon dioxide and nutrients throughout the body.

Name two organs involved with the circulatory system.

_____ and _____.

What are the muscles called that are found in-between each rib?

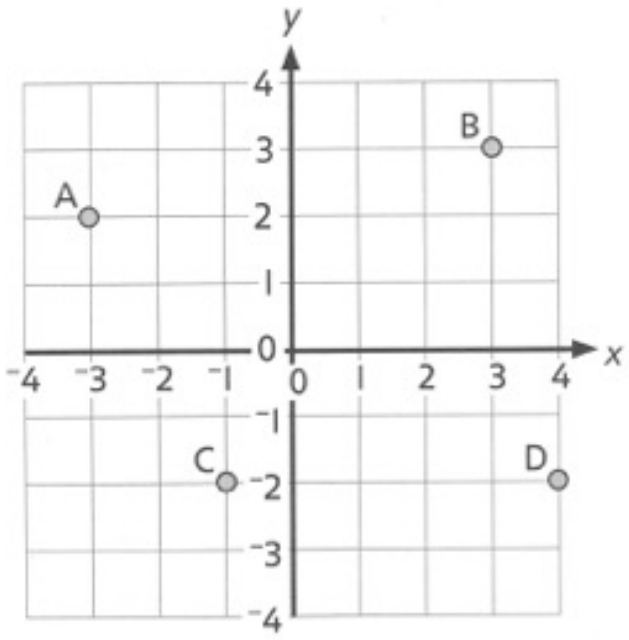
_____

Week 11 Day 4

→ Textbook 6A p216

Plotting coordinates

1



a) What are the coordinates of the points on the grid?

Point A (☐ , ☐)

Point B (☐ , ☐)

Point C (☐ , ☐)

Point D (☐ , ☐)

b) Now plot these coordinates on the grid.

Point E $(^{-}3, ^{-}2)$

Point F $(2, ^{-}1)$

Point G $(^{-}1, 3)$

Point H $(^{-}3, 0)$

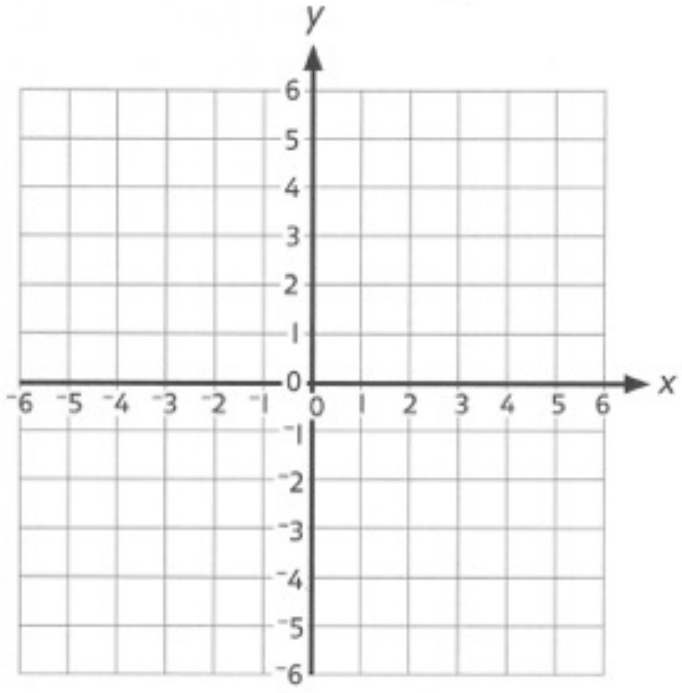
I know that the first number counts along the *x*-axis and that the second number counts up or down the *y*-axis.

2 The sets of coordinates below make shapes.

Shape A coordinates: (0,2), (3,2), (⁻1,⁻2), (4,⁻2)

Shape B coordinates: (⁻5,1), (⁻3,1), (⁻2,⁻1), (⁻3,⁻2), (⁻5,⁻2), (⁻6,⁻1)

Plot the coordinates on the grid and connect them to work out the shapes.



Shape A is a _____ .

Shape B is a _____ .

3 Lucy says, 'It doesn't matter which way round you write coordinates in brackets. You would always get the same point when you plotted them.' Is Lucy correct? Why?

_____

_____

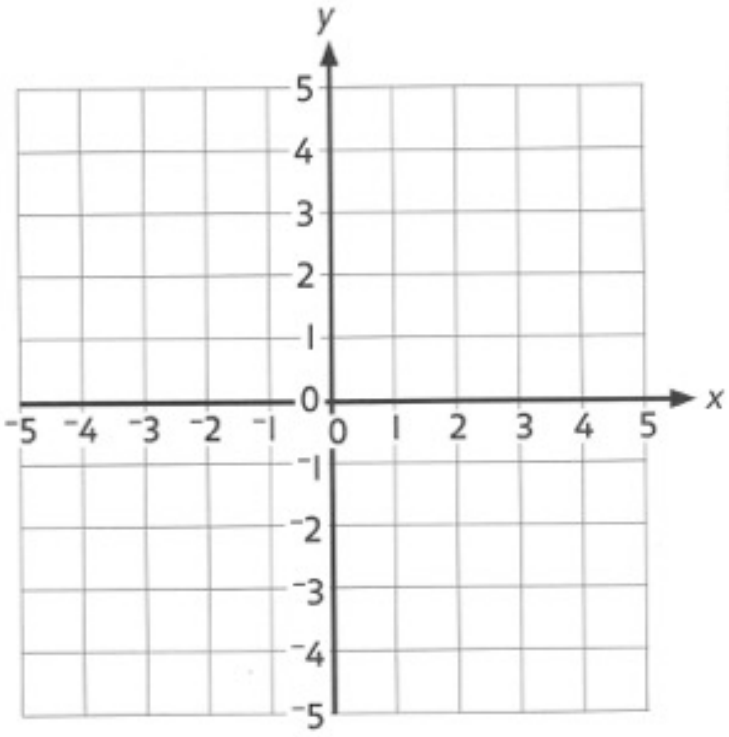
_____

_____

CHALLENGE

4 Mia has plotted three points of a rectangle: $(^{-}3,3)$, $(4,3)$, $(4,^{-}1)$.

What point does Mia need to plot to complete her rectangle?



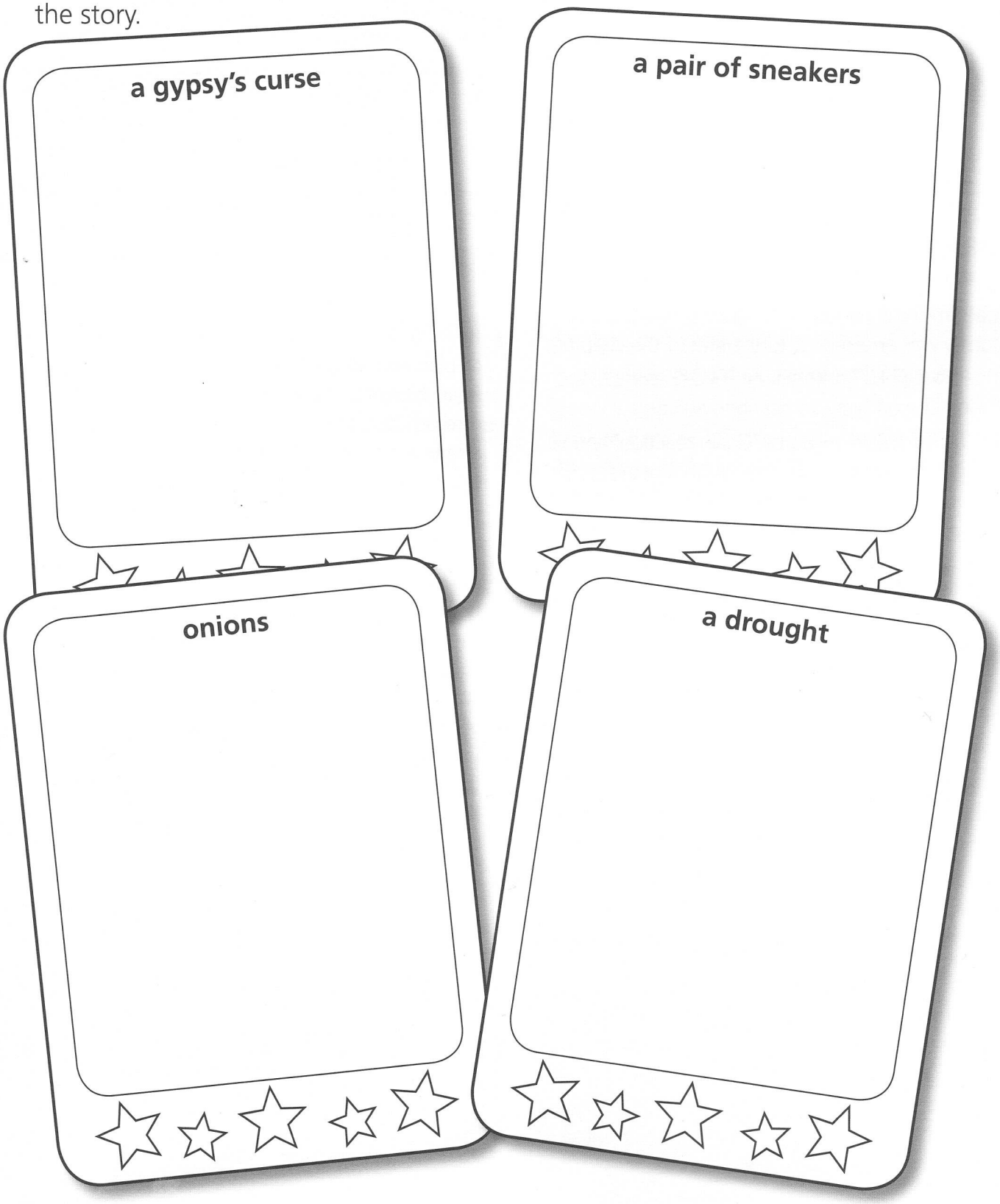
Mia needs to plot the point (☐ , ☐) to complete her rectangle.

Reflect

Lily says: 'It is harder to plot coordinates in all four quadrants than to plot them in just one.' Do you agree with her? Why?

Superstitions

- Make notes on how the following subjects demonstrate superstitious belief in the story.



- Write about another superstition from the story on the other side of this sheet.

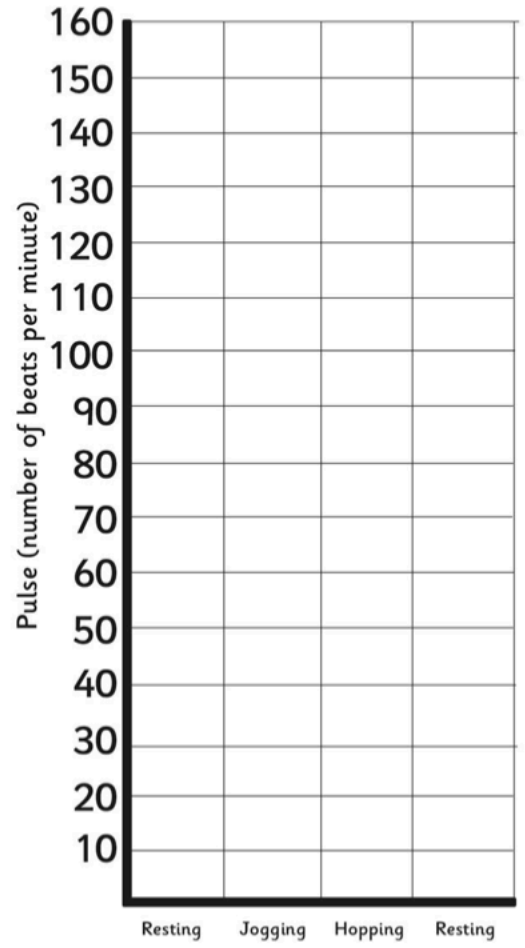
Recording Pulse Rates Worksheet

Blood is pumped around the body by the heart through vessels called arteries and veins. Arteries carry blood away from the heart to the rest of the body and veins return the blood to the heart. Heart rate can be measured, when an artery crosses a bone, press a finger against the skin to feel the blood pumping. This is called a pulse. A child's pulse is on average 70 to 80 beats per minute.

Plot Samir's pulse rate on the graph.

A doctor measured Samir's pulse to be 70 beats per minute. Samir jogged for 1 minute, his pulse went up to 110 beats per minute. After hopping for another minute, his pulse was 160 beats per minute. Samir rested for 2 minutes and his new pulse was 120 beats per minute.

How does exercise affect Samir?



Find your pulse. Does it change after exercise? Design and conduct an experiment to see how your pulse changes after exercise.

Week 11 Day 5

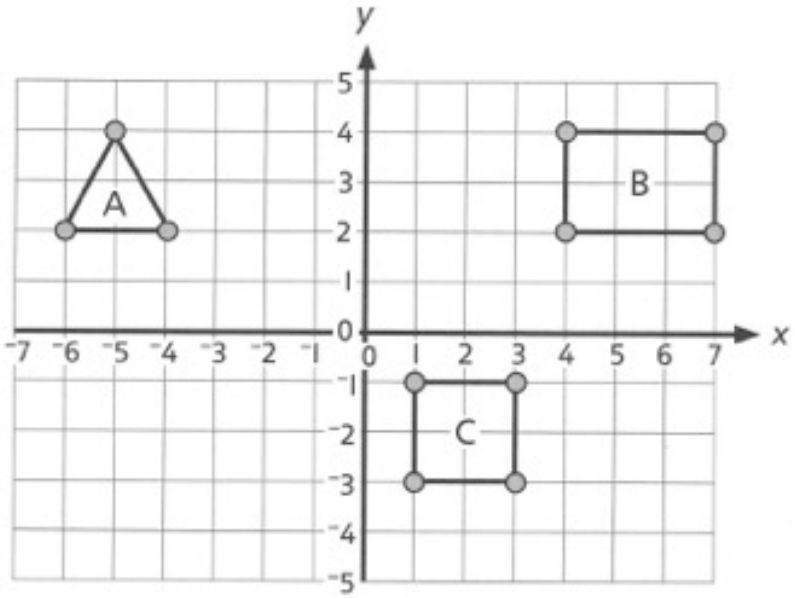
Plotting translations and reflections

1 Complete the reflections. Draw your answers on the coordinates grid.

a) Reflect shape A in the *x*-axis.

b) Reflect shape B in the *x*-axis.

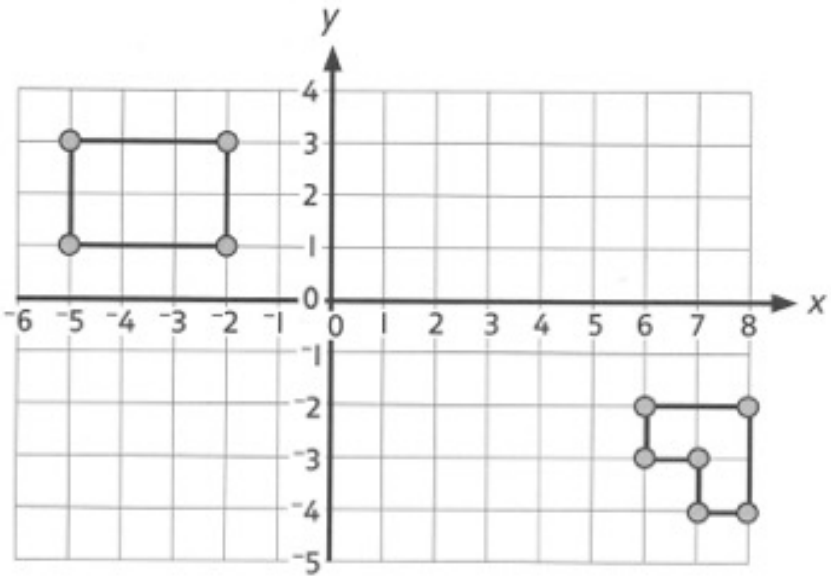
c) Reflect shape C in the *y*-axis.



2 Complete the translations. Draw your answers on the coordinate grid.

a) Translate the rectangle 4 down and 3 to the right.

b) Translate the irregular hexagon 5 up and 6 to the left.

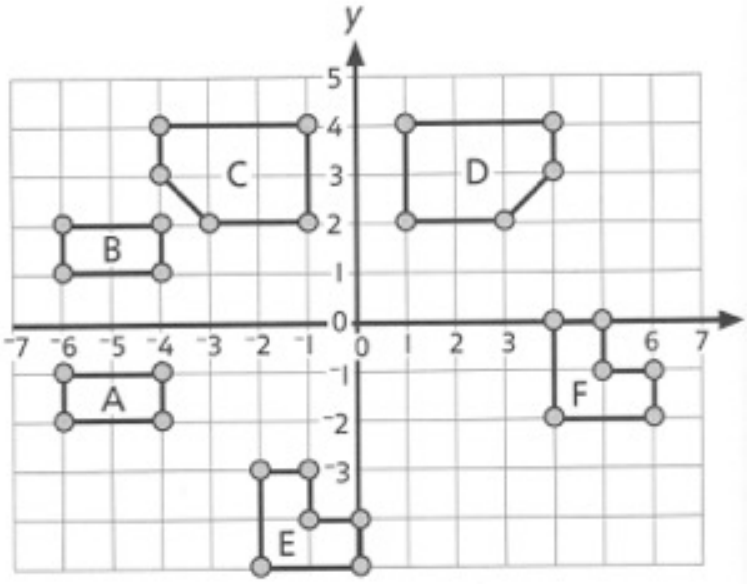


3 Complete the following sentences.

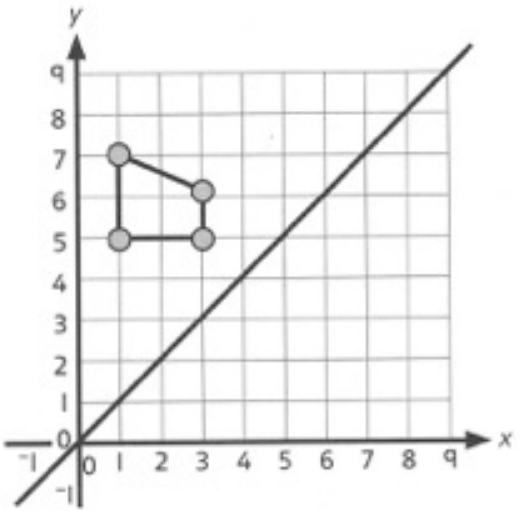
Shape A has been _____ in _____ to make shape B.

Shape C has been reflected in _____ to make shape D.

Shape _____ has been _____ ☐ units _____ and ☐ units _____ to make Shape F.



4 Reflect this shape in the diagonal line. Draw your answer on the grid.

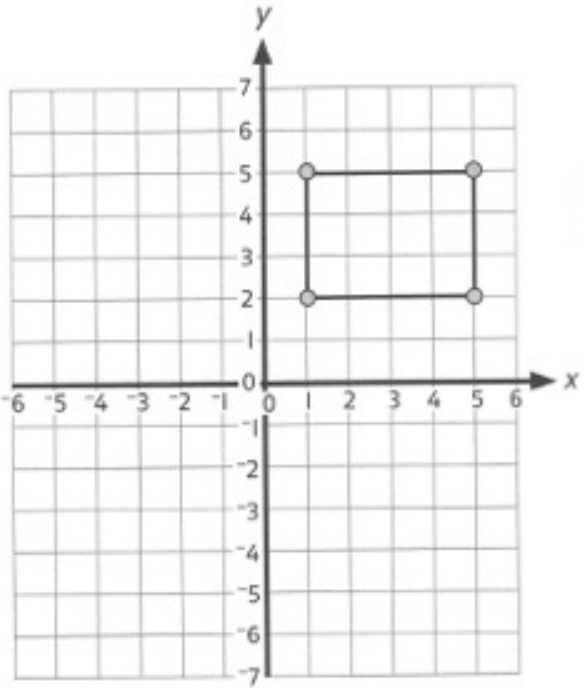


5 This rectangle is reflected in the *y*-axis.

Write the coordinates of the vertices of the reflected rectangle:

(☐, ☐), (☐, ☐),

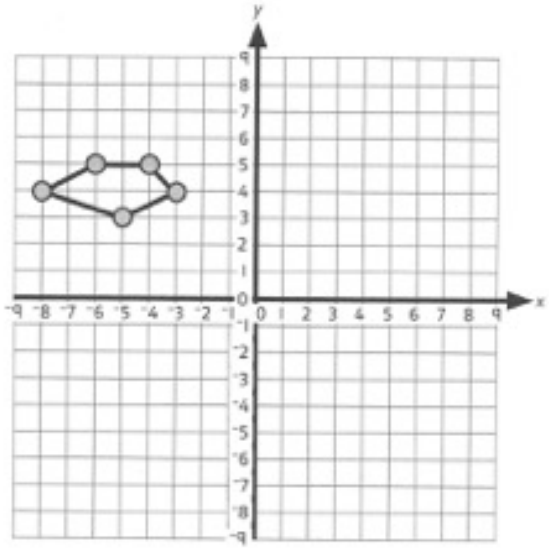
(☐, ☐), (☐, ☐)

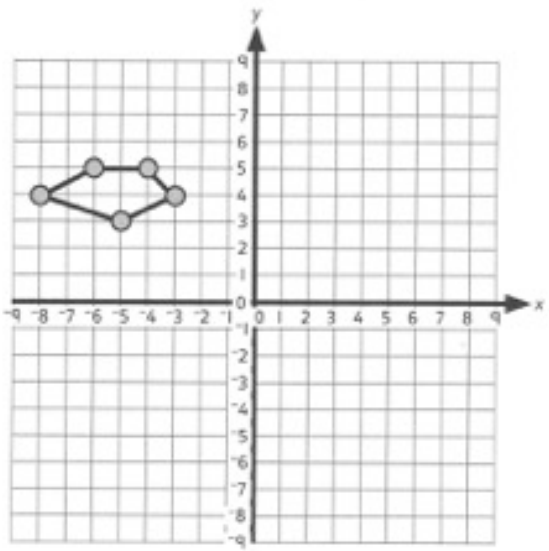


CHALLENGE

6 a) Reflect this shape in the *y*-axis. Then translate it 3 to the right and 2 down.

b) Now translate the first shape 3 to the right and 2 down, and then reflect it in the *y*-axis.





Do you get the same answer for a) and b)? Why or why not?

I do / do not get the same answers (circle as appropriate) because

_____

Reflect

Charlie says: 'When you reflect or translate a shape, the reflected or translated shape is identical to the shape you started with.' Is Charlie correct?

Discuss with your partner and write your answer here.

_____

_____

Comprehension Questions To Support The Teaching of Holes By Louis Sachar

Read Chapters 28-29

1. How has Green Lake changed when Kate Barlow returns after 20 years?

2. Why does Kate tell Linda Walker that she is sorry?

3. Do you think Kate Barlow is afraid of Trout? Why/Why not?

4. What does Kate do with the stolen money?

5. Why does Kate die laughing?

6. Do you think Kate would ever have told Trout where her money was? Why/Why not?

7. Why do you think Kate Barlow has felt cold all her life?

8. Why are the boys hoping for more rain?

9. What rock formation does Stanley see in the lightning?

10. How does Stanley's great-grandfather end up in the desert?

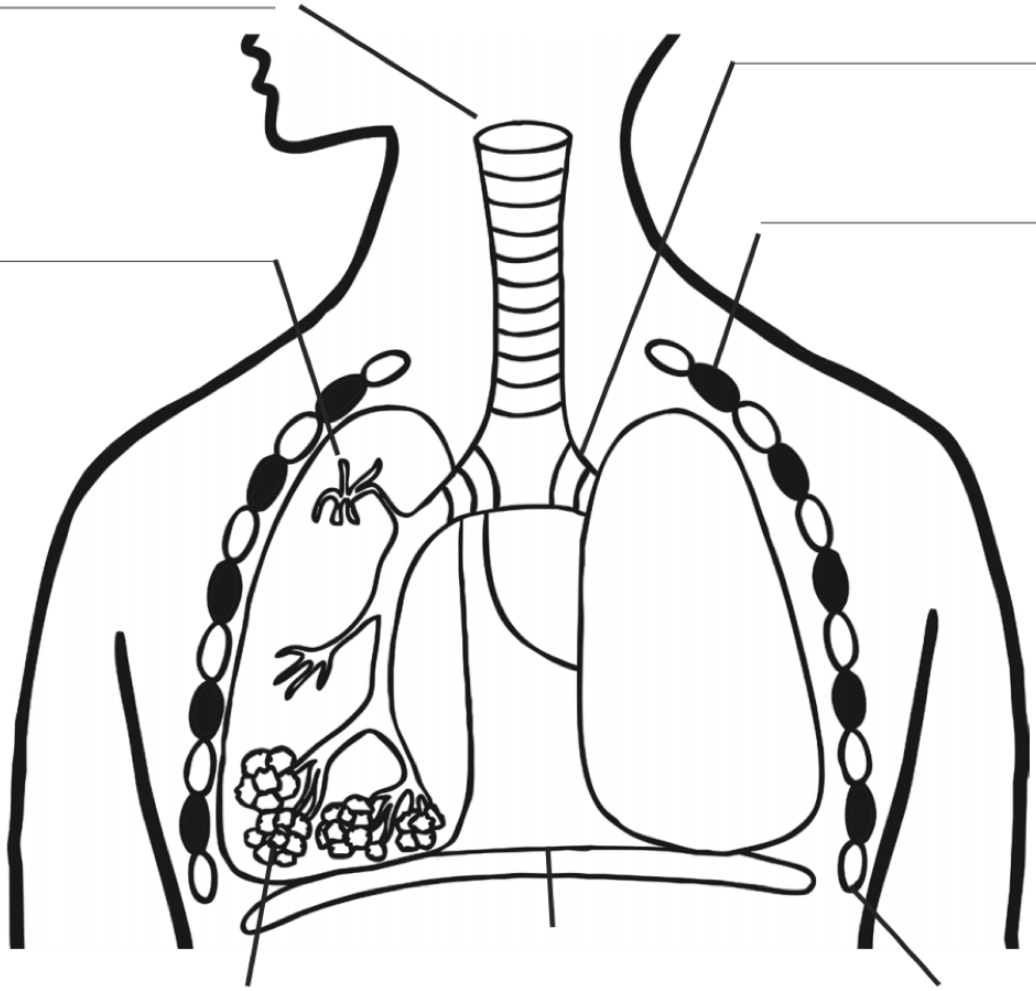
11. How long does Stanley's great-grandfather survive in the desert?

12. Where does Stanley's great-grandfather meet his future wife?

13. If you had to spend three weeks on a desert island, what four things would you take with you, and why?

The Human Lung System

Label the parts of the lung system.



intercostal muscles

bronchus

ribs

alveoli

trachea

bronchioles

diaphragm

Making a Model of the Lungs

Equipment:

- A clean, clear plastic bottle (with a narrow neck / about 500ml)
- A balloon
- Modelling clay
- A drinking straw
- Sticky tape
- A strong plastic food bag
- Scissors
- Sand paper (optional)

Step 1: Remove and discard the lid from your bottle.

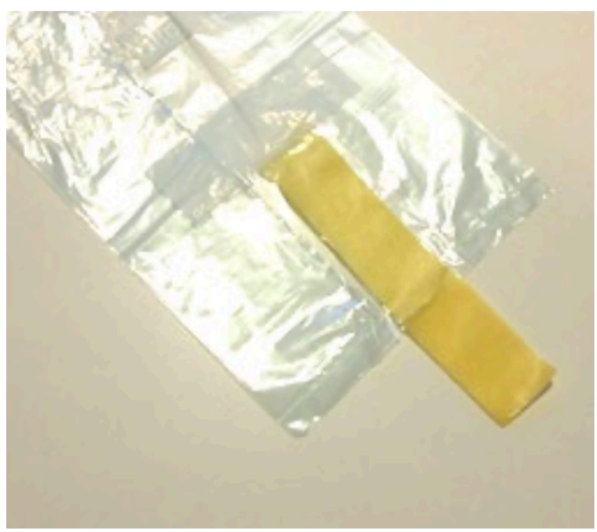
Carefully cut all the way around the bottle, about a quarter of the way up, in order to remove the bottom of the bottle.

Step 2: (optional) Carefully sand the rough edges from the bottom of the bottle to avoid cutting yourself or tearing the plastic you will later attach.

Step 3: Carefully insert one end of the drinking straw into the opening of the balloon. Secure well with sticky tape so there are no gaps at all.

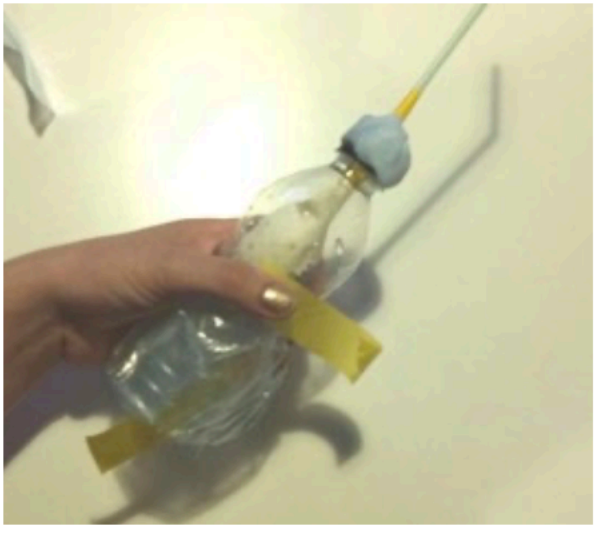
Step 4: From the bottom of the bottle, insert the straw through the opening in the neck of the bottle.

Step 5: Secure the straw in the bottle neck by packing modelling clay around it. You need to ensure that you do not crush the straw, but also that the seal is completely airtight.



Step 6: Take the plastic food bag and create a tab on the bottom, by folding the middle of a strip of tape on it's self, then attaching with the sticky ends.

Step 7: Place the bag over the cut end of your bottle, and stuff the excess gently into it.



Step 8: Secure the plastic bag around the bottle with tape. Again you need to ensure that the seal is completely airtight.

Step 9: Gently pulling the tab down should inflate the balloon. Try it and then observe carefully.

Questions

Use your model to answer the questions about how the lungs function.

1. Match the parts of your model to the parts of the gas exchange system they represent by drawing a straight line.

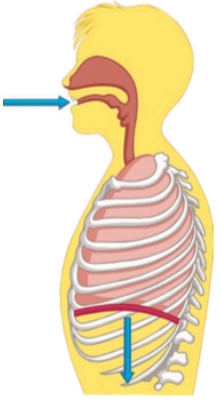
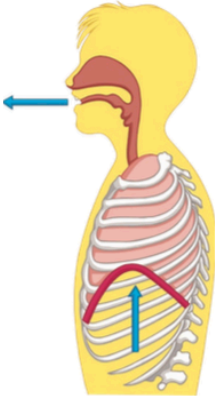
straw	chest cavity
bottle	diaphragm
balloon	bronchi
plastic bag	lungs

2. Pull the tab on your model. This represents the diaphragm contracting. Now complete the sentences.

   a. When the diaphragm contracts, it moves _____

   b. When the diaphragm relaxes, it moves _____

   c. When the diaphragm contracts, the lungs _____

   d. When the diaphragm relaxes, the lungs _____

3. Label and describe the changes in each picture below.