

Wednesday 17th June

Hello Year 6,

We can't believe that its already the middle of June!

As you probably are aware, things are starting to change at Howley Grange as some children are coming back to school. There are many of you who are still learning at home though, and we just want you to know that we miss you and hopefully will be able to see you at some point soon. In the meantime, keep working hard with the home-learning and know that we are thinking of you.

Here are the activities for this week for you to follow and complete. If you have some spare time or want to do some extra learning, you could visit <https://www.bbc.co.uk/bitesize> or <https://www.thenational.academy/online-classroom> where there are lots of lessons and activities to choose from.

As always, 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](#).

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 Activity 3 - Get planning!



Get Planning!

★ Use the boxed-up planner to plan your facts. It has the same structure as my text. Make notes or draw pictures.

Name of animal	
What is it? <i>Introduce the animal</i>	
Appearance <i>What does it look like?</i>	
Habitat <i>Where does it live?</i>	
Diet <i>What does it eat?</i>	
Talents <i>What can it do?</i>	
Fascinating facts	



Maths Activity 3a - Ten in ten

1. $32 \times 4 =$
2. $1052 + 432 =$
3. $49 \div 7 =$
4. $\frac{3}{4} - \frac{1}{4} =$
5. $776 \div 8 =$
6. $2.34 \times 100 =$
7. 20% of 2300 =
8. $1.24 \times 8 =$
9. $\frac{1}{5} + \frac{4}{5} =$
10. $4671 + 9175 =$

Remember - ten questions in ten minutes.

There's five extra challenge questions if you have spare time.

Challenge

11. $35 - 3 \times 4 =$
12. $\frac{3}{4} \div 3 =$
13. $1\frac{2}{5} - \frac{3}{5} =$
14. $5043 \div 41 =$
15. $48 \times 26 =$

Maths Activity - Reflections

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 too.

There is a ** activity and a *** activity to choose from today (or perhaps even do both!).

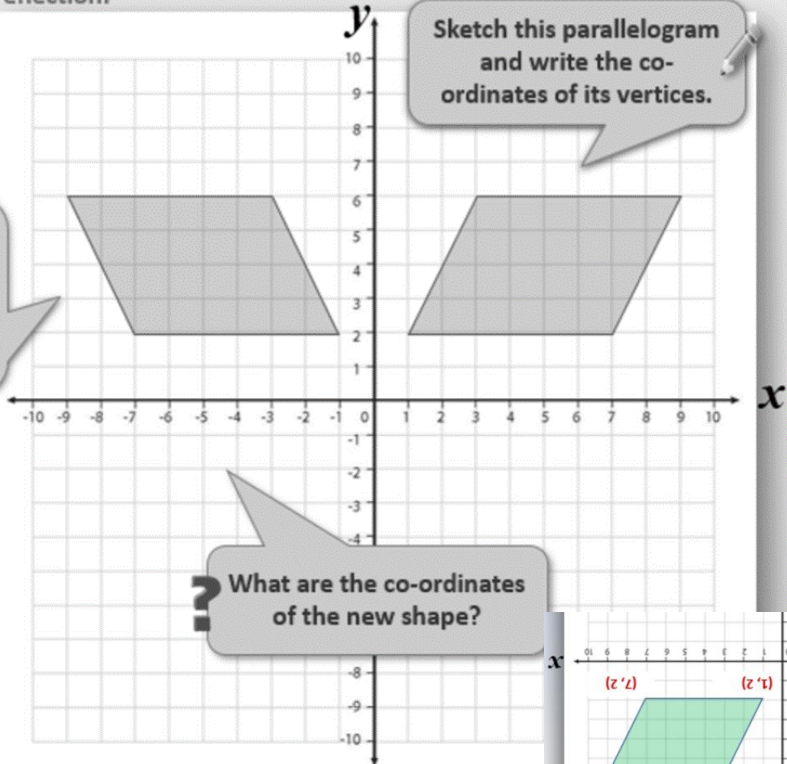
If you are still unsure of what to do, there is a 'Bit Stuck' activity to try that might help.

Learning Reminder

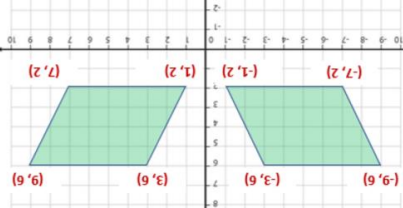
Work out new co-ordinates after a reflection.

Sketch this parallelogram and write the co-ordinates of its vertices.

We reflect this parallelogram across the y-axis. The new shape must be the same distance away from the y-axis as the first one, but 'flipped' over.



What are the co-ordinates of the new shape?

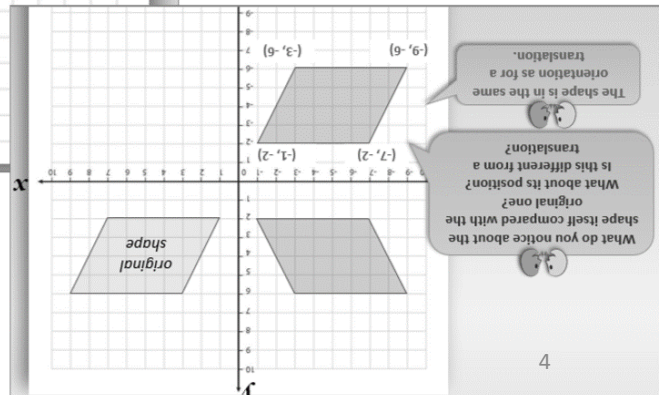
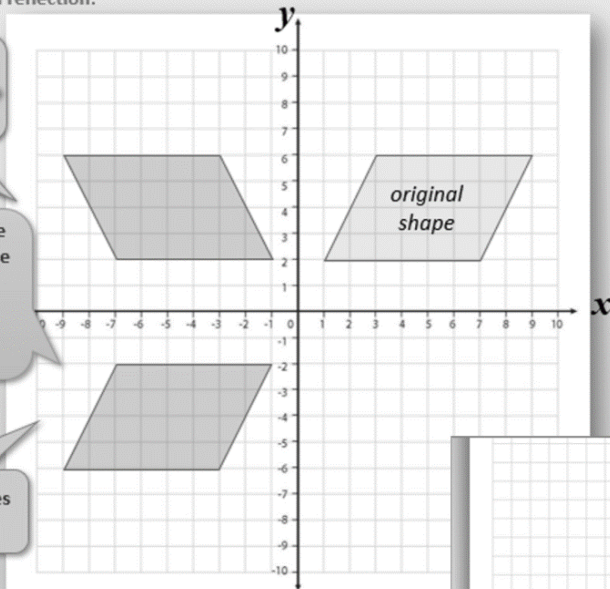


Work out new co-ordinates after a reflection.

Now reflect this new shape in the x-axis.

What do you notice about the shape itself compared with the original one? What about its position? Is this different from a translation?

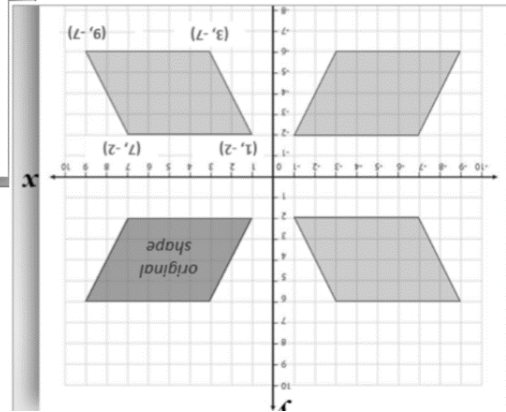
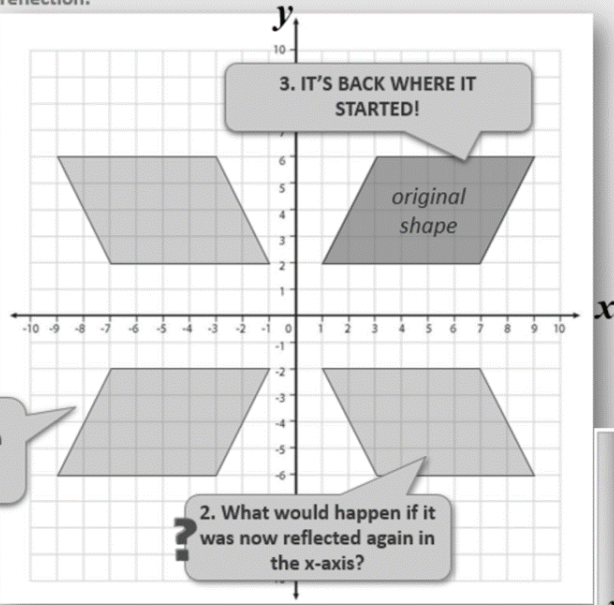
What are the co-ordinates of the new shape?



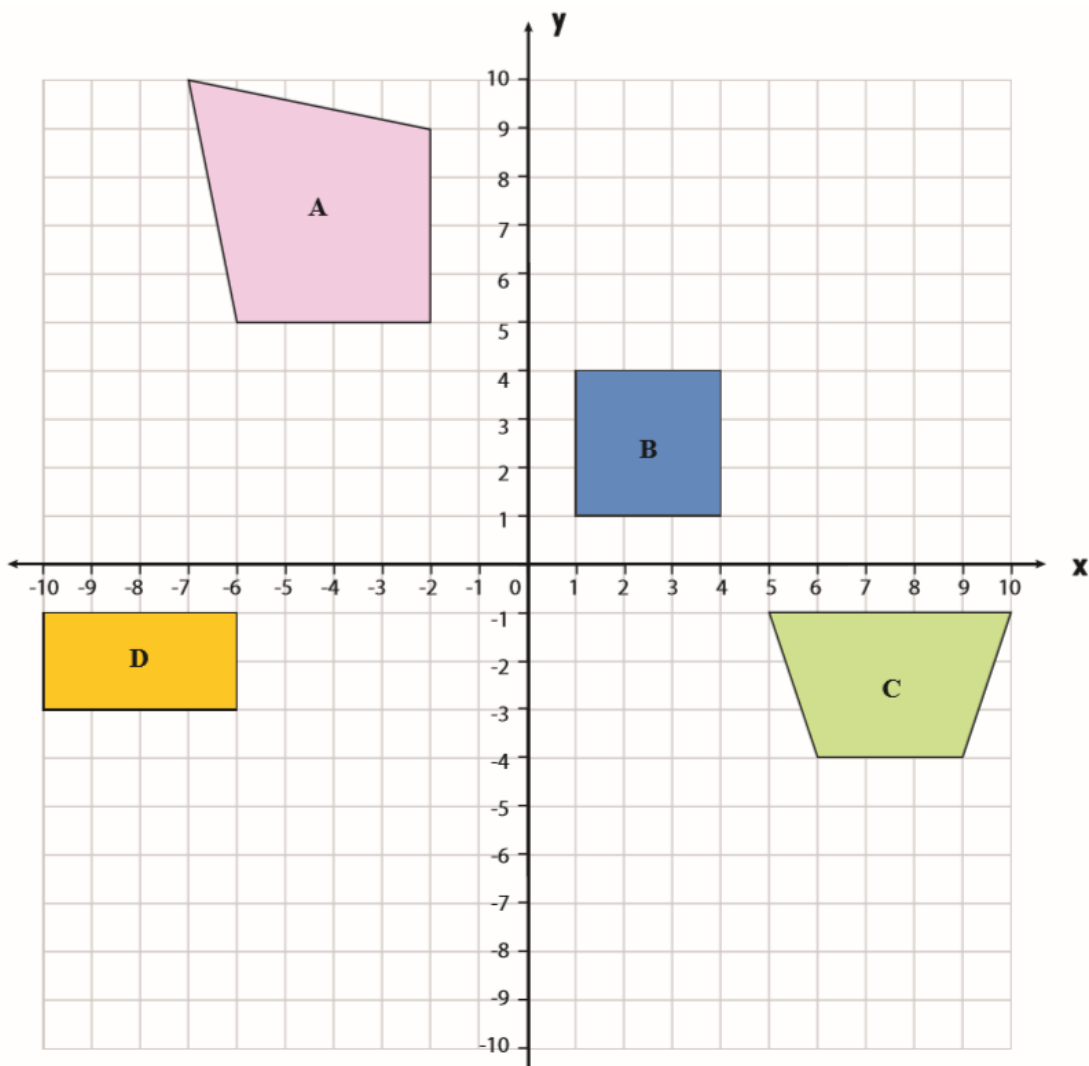
What do you notice about the shape itself compared with the original one? What about its position? Is this different from a translation? The shape is in the same orientation as for a translation.

Learning Reminder

Work out new co-ordinates after a reflection.



Maths Activity - 3b** Reflections



Look at each quadrilateral and write its name.
Write its co-ordinates.

1. Reflect shapes A then B in the y -axis. Write the co-ordinates of the reflected shapes.
2. Reflect shapes C then D in the x -axis. Write the co-ordinates of the reflected shapes.

Challenge

Draw a quadrilateral with no right angles and no parallel sides.

Write its co-ordinates.

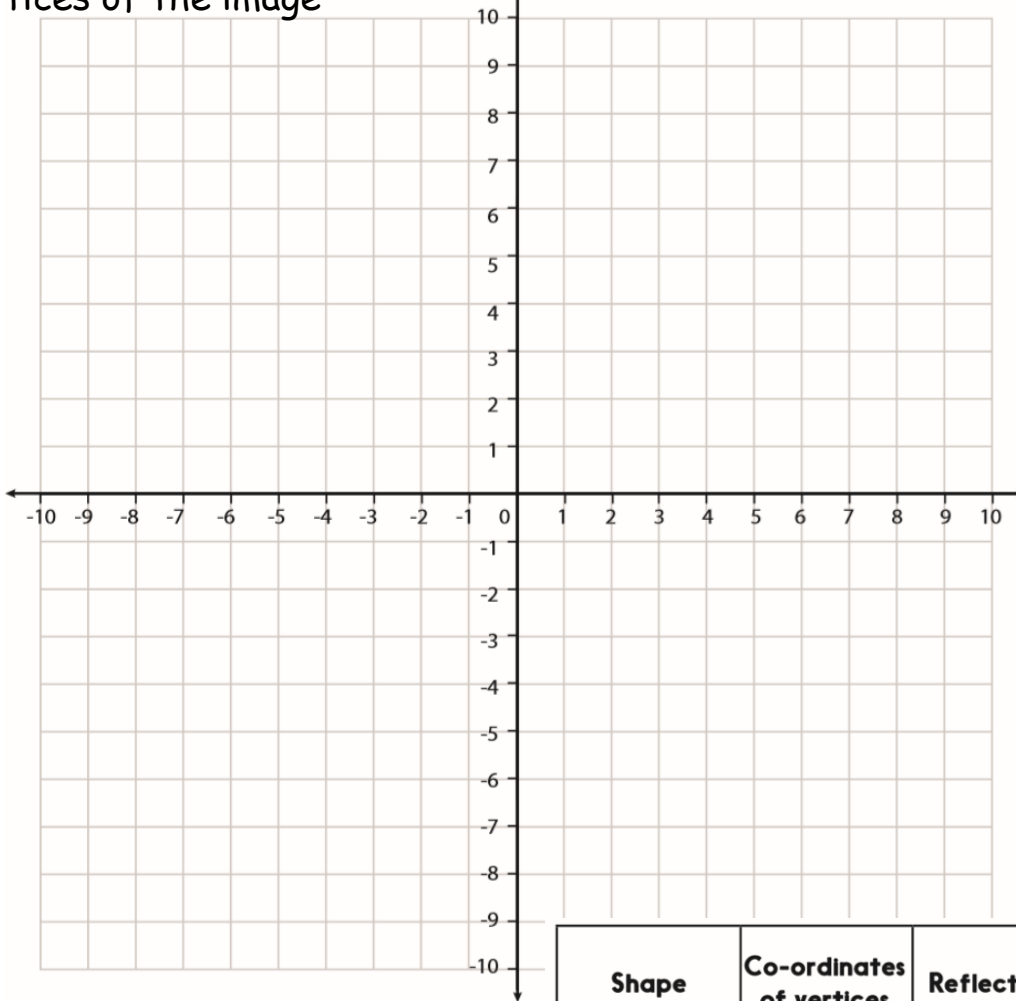
Write the co-ordinates the shape will have after being reflected in the y -axis.

Reflect the shape in the y -axis.

Were your co-ordinates correct?

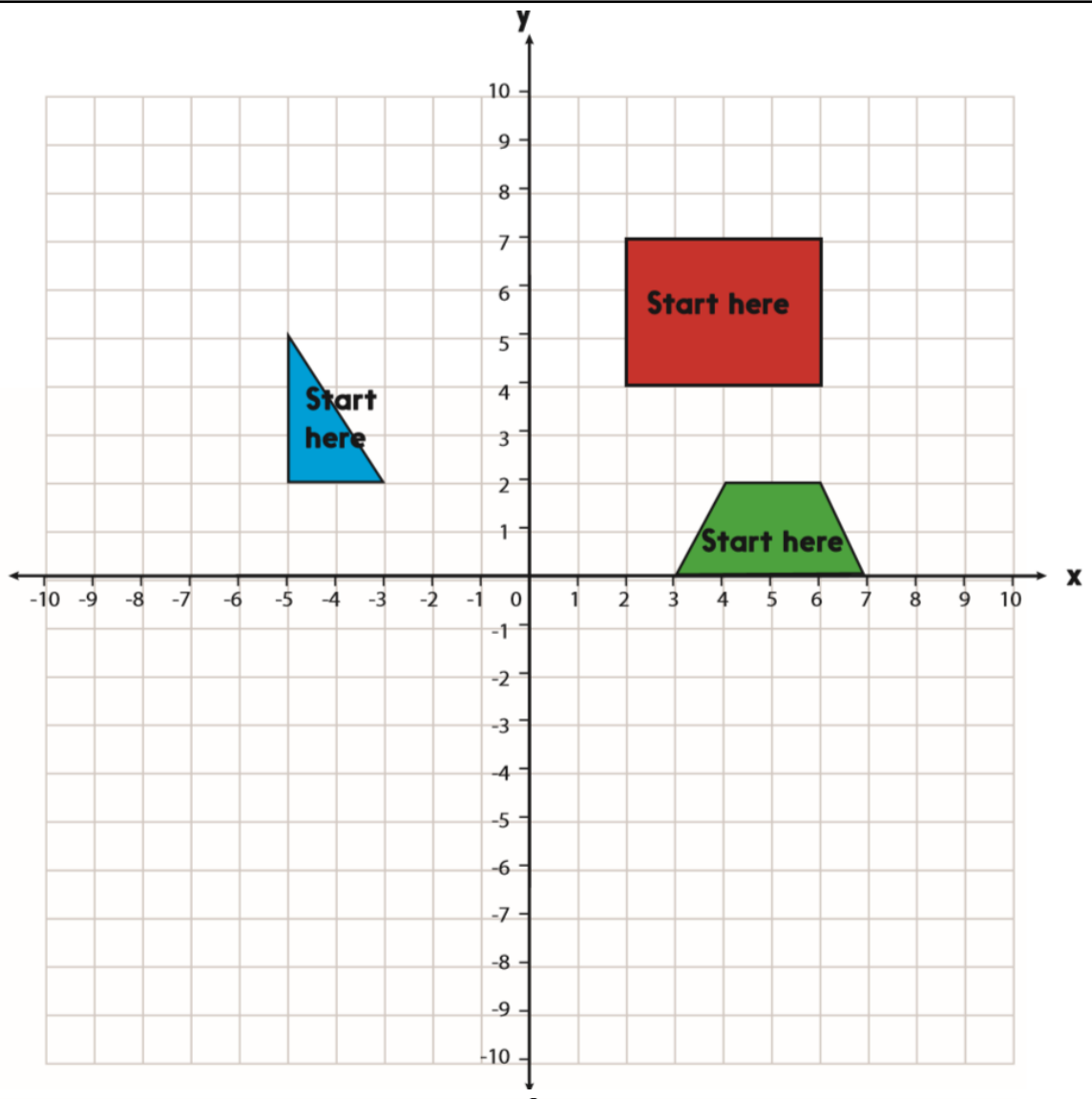
Maths Activity - 3b*** Reflections

Plot each quadrilateral and its image. Write down the co-ordinates of the vertices of the image

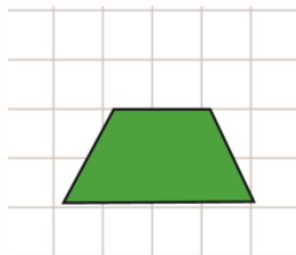
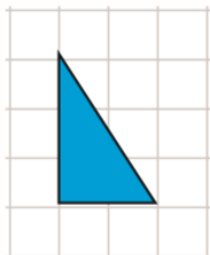
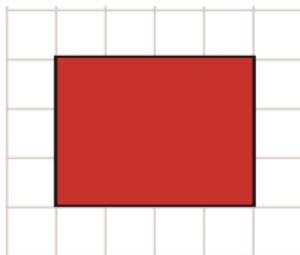


Shape	Co-ordinates of vertices	Reflected in	Co-ordinates of vertices of image
Square	A (-7, 2) B (-5, 2) C (-7, 0) D (-5, 0)	x-axis	A (,) B (,) C (,) D (,)
Rectangle	E (-9, 9) F (-4, 9) G (-9, 7) H (-4, 7)	y-axis	E (,) F (,) G (,) H (,)
Rhombus	I (-4, 2) J (-2, 3) K (-2, 1) L (0, 2)	x-axis then y-axis	I (,) J (,) K (,) L (,)
Parallelogram	M (-5, 4) N (-4, 6) O (-2, 4) P (-1, 6)	y-axis then x-axis	M (,) N (,) O (,) P (,)
Trapezium	Q (-9, 3) R (-8, 6) S (-7, 6) T (-6, 3)	x-axis then y-axis	Q (,) R (,) S (,) T (,)
Kite	U (-3, 8) V (-2, 9) W (-2, 6) X (-1, 8)	y-axis then x-axis	U (,) V (,) W (,) X (,)

A Bit Stuck - Reflection



- Cut out these shapes.



- Place the rectangle on the starting position in the co-ordinates grid.
- Write the co-ordinates of the four vertices.
- Reflect the rectangle in the y -axis. Make sure you turn it over as you do so. Write the new co-ordinates. The x co-ordinates will have changed but not the y coordinates.
- Move the rectangle back to the start.
- Reflect the rectangle in the x -axis. Write the new co-ordinates. Describe what happens to the co-ordinates this time...
- Repeat for the triangle and trapezium.

Maths Activity 3c - Check your understanding

A rectangle is reflected in the x-axis.

Its co-ordinates are now: $(2, -1)$, $(7, -1)$, $(2, -6)$ and $(7, -6)$. Draw it in its original position.

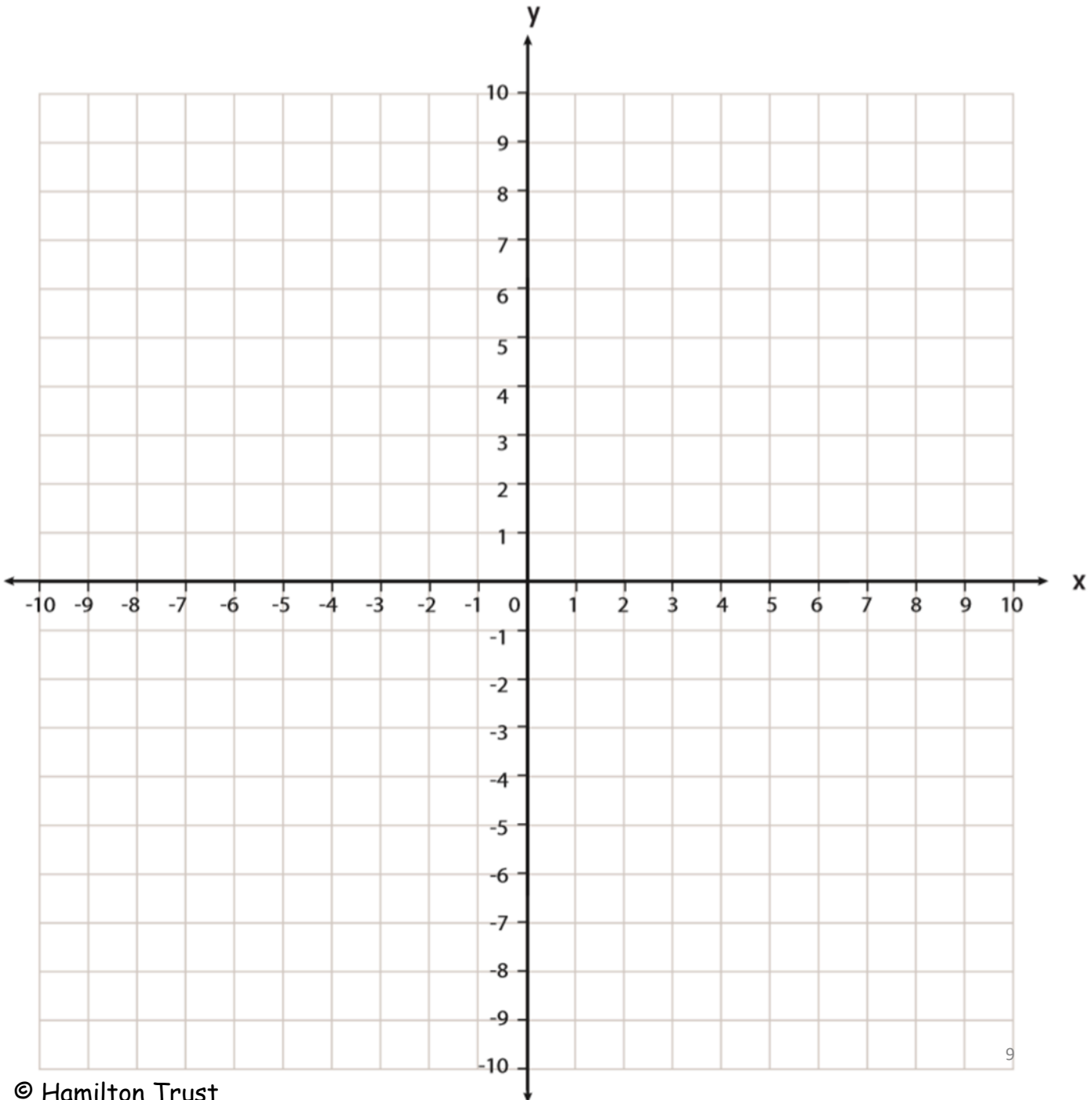
A triangle is reflected in the y-axis.

Its co-ordinates are now: $(2, 0)$ $(5, 2)$ and $(3, 7)$. Draw it in its original position.

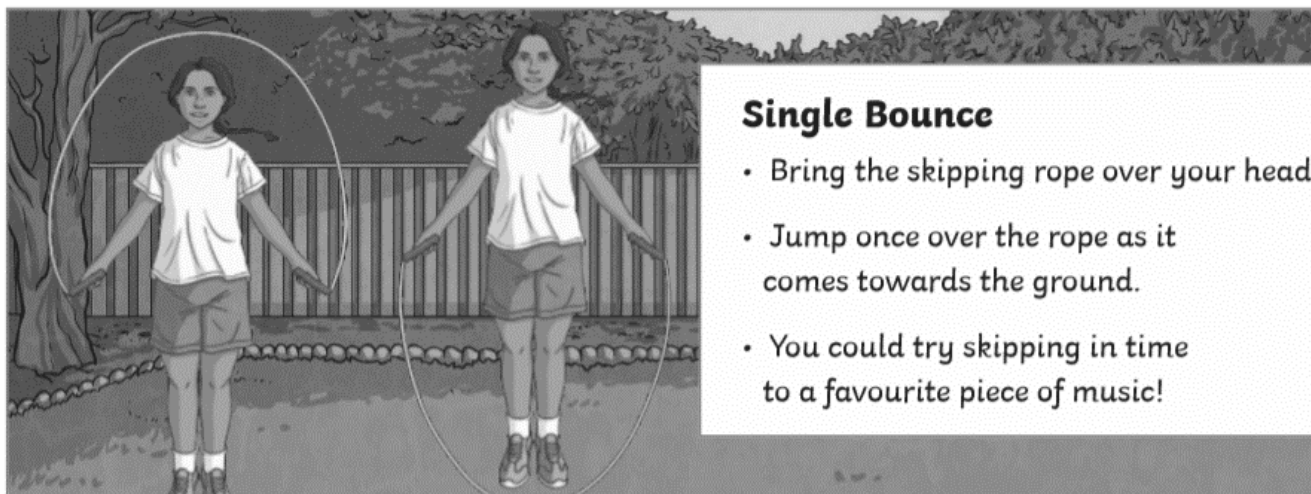
$(0,0)$ $(5,0)$ $(5,5)$ $(0,5)$ is a shape.

When it is reflected in the y-axis, two pairs of co-ordinates do not change. Why not?

Sketch it to explain.



Move at Home: Skipping Workout 1

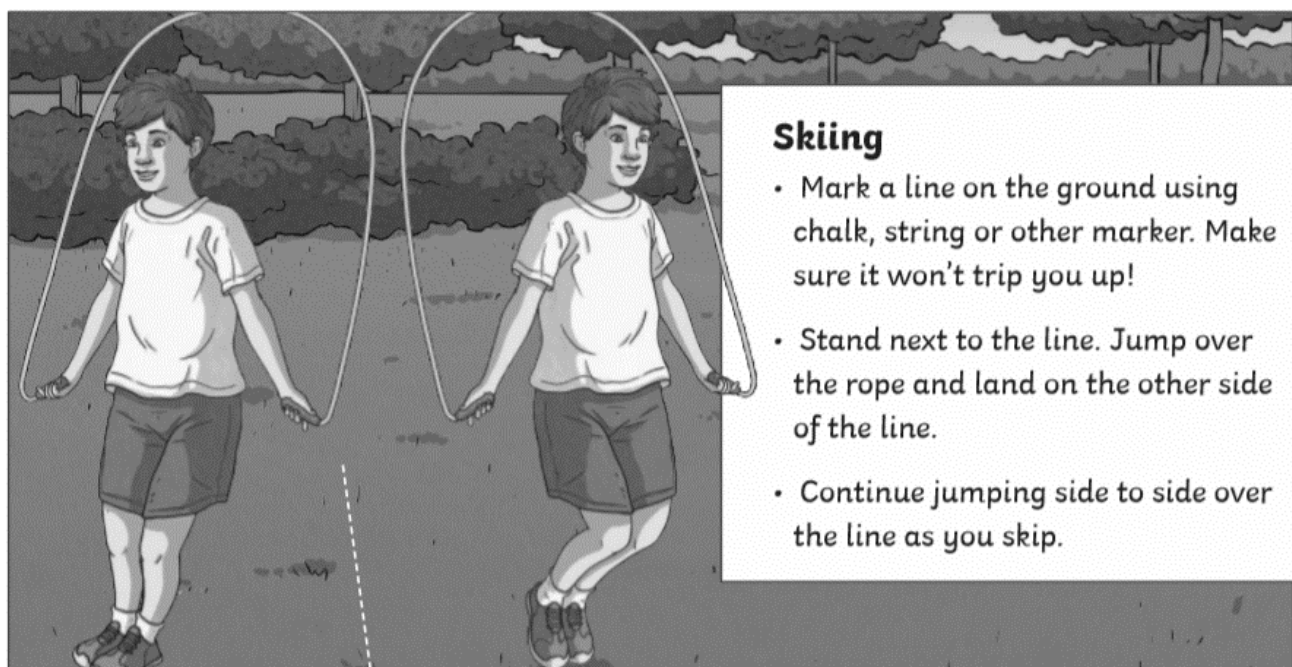
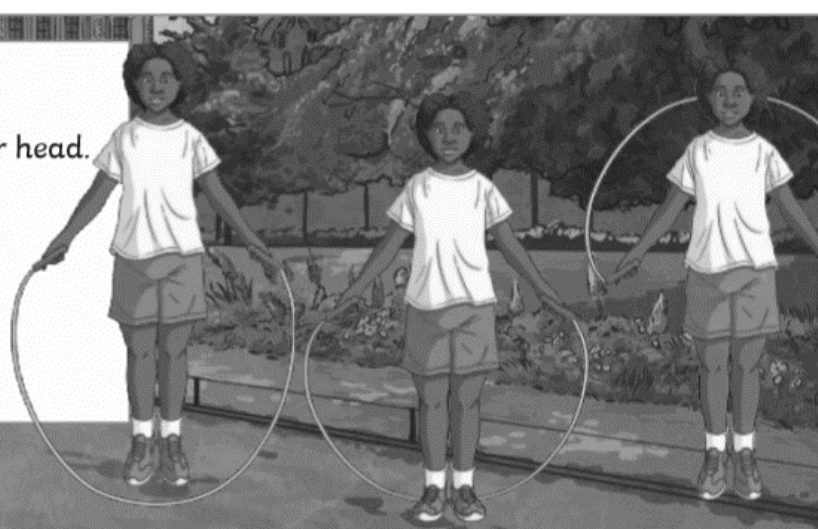


Single Bounce

- Bring the skipping rope over your head.
- Jump once over the rope as it comes towards the ground.
- You could try skipping in time to a favourite piece of music!

Double Bounce

- Bring the skipping rope over your head.
- Jump once over the rope as it comes towards the ground.
- As you bring the rope back up behind you, jump a second time.

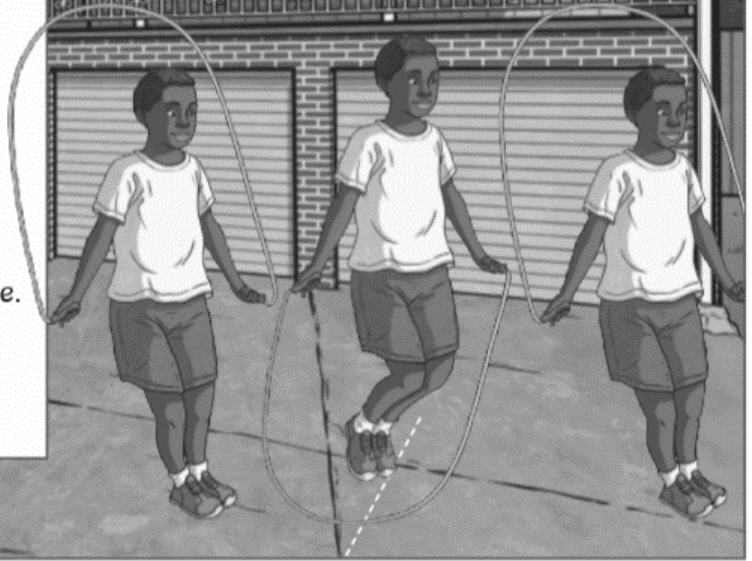


Skiing

- Mark a line on the ground using chalk, string or other marker. Make sure it won't trip you up!
- Stand next to the line. Jump over the rope and land on the other side of the line.
- Continue jumping side to side over the line as you skip.

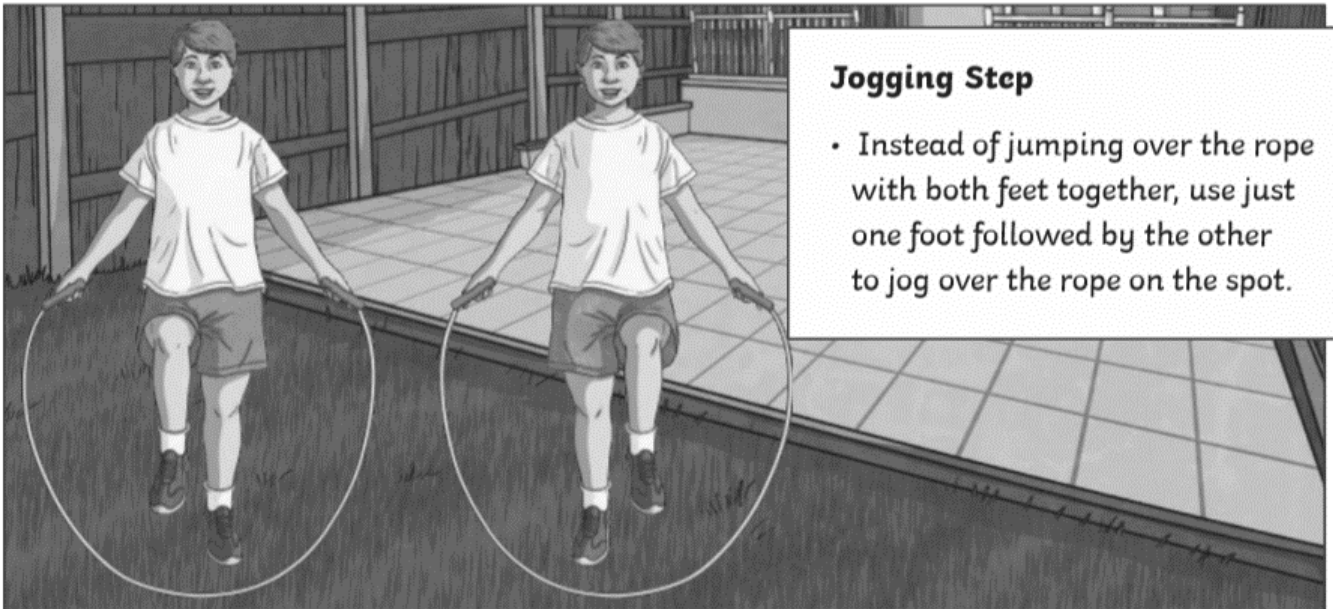
Back and Forth

- Mark a line on the ground using chalk, string or other marker. Make sure it won't trip you up!
- Stand behind the line. Jump forwards over the rope and land in front of the line.
- Continue jumping back and forth over the line.



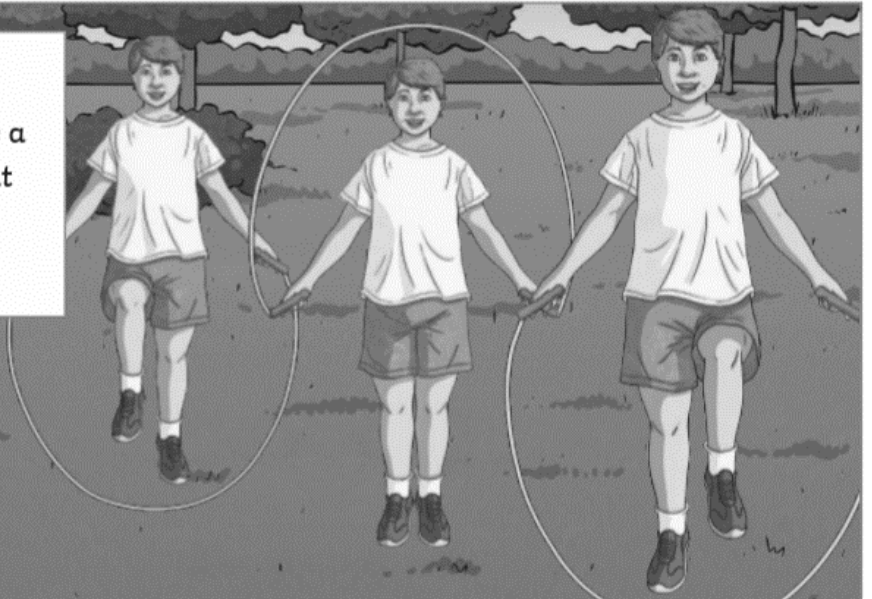
Jogging Step

- Instead of jumping over the rope with both feet together, use just one foot followed by the other to jog over the rope on the spot.



Forward Motion

- Like the jogging step but take a step forward each time so that you can move in a forwards while jogging over the rope.



ANSWERS Maths Activity 3a - Ten in ten

1. $32 \times 4 = 128$
2. $1052 + 432 = 1484$
3. $49 \div 7 = 7$
4. $\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$ or equivalent
5. $776 \div 8 = 97$
6. $2.34 \times 100 = 234$
7. 20% Of 2300 = 460
8. $1.24 \times 8 = 9.92$
9. $\frac{1}{5} + \frac{4}{5} = 1$ or equivalent
10. $4671 + 9175 = 13,846$

Challenge

11. $35 - 3 \times 4 = 23$
12. $\frac{3}{4} \div 3 = \frac{3}{12}$ or equivalent
13. $1\frac{2}{5} - \frac{3}{5} = \frac{1}{5}$ or equivalent
14. $5043 \div 41 = 123$
15. $48 \times 26 = 1248$

ANSWERS Maths Activity - 3b** and 3b***

**

A Quadrilateral

(-2, 5), (-2, 9), (-6, 5), (-7, 10)

Reflection in y-axis: (2, 5), (2, 9), (6, 5), (7, 10)

B Square

(1, 1), (1, 4), (4, 1), (4, 4)

Reflection in y-axis: (-1, 1), (-1, 4), (-4, 1), (-4, 4)

C Trapezium

(5, -1), (10, -1), (6, -4), (9, -4)

Reflection in x-axis: (5, 1), (10, 1), (6, 4), (9, 4)

D Rectangle

(-6, -1), (-6, -3), (-10, -1), (-10, -3)

Reflection in x-axis: (-6, 1), (-6, 3), (-10, 1), (-10, 3)

Shape	Co-ordinates of vertices	Reflected in	Co-ordinates of vertices of image
Square	A (-7, 2) B (-5, 2) C (-7, 0) D (-5, 0)	x-axis	A (-7, -2) B (-5, -2) C (-7, 0) D (-5, 0)
Rectangle	E (-9, 9) F (-4, 9) G (-9, 7) H (-4, 7)	y-axis	E (9, 9) F (4, 9) G (9, 7) H (4, 7)
Rhombus	I (-4, 2) J (-2, 3) K (-2, 1) L (0, 2)	x-axis then y-axis	I (4, -2) J (2, -3) K (2, -1) L (0, -2)
Parallelogram	M (-5, 4) N (-4, 6) O (-2, 4) P (-1, 6)	y-axis then x-axis	M (5, -4) N (4, -6) O (2, -4) P (1, -6)
Trapezium	Q (-9, 3) R (-8, 6) S (-7, 6) T (-6, 3)	x-axis then y-axis	Q (9, -3) R (8, -6) S (7, -6) T (6, -3)

ANSWERS Maths Activity 3c- Check your understanding

A rectangle is reflected in the x-axis.

Its co-ordinates are now: (2, -1), (7, -1), (2, -6) and (7, -6).

Draw it in its original position.

(2, 1), (7, 1), (2, 6) and (7, 6). Originally it must have been in the first quadrant. The x values are unaffected by the reflection.

A triangle is reflected in the y-axis. Its co-ordinates are now: (2,0) (5,2) and (3,7).

Draw it in its original position.

(-2, 0) (-5, 2) and (-3, 7). Originally it must have been in the 2nd quadrant (on the left of the y-axis above the x-axis). The y- values are unchanged by the reflection.

(0,0) (5,0) (5,5) (0,5) is a shape.

When it is reflected in the y-axis, two pairs of co-ordinates do not change. Why not? (0,0) and (0,5) do not move as they are located on the y-axis itself.

Sketch it to explain. As before, look for accurately plotted shapes.