

Year 4

Home Learning Pack

Week Beginning:

6th July 2020

Where possible each day you could complete:

- 20 minutes of reading
- 20 minutes of TT Rockstars
- 20 minutes of a grid activity - see attached
 - The daily twitter challenge

3 pieces of maths work and 3 pieces of literacy work have been set.

3 activities have been set as work on Purple Mash

Look on the school website under pupils for the teacher demonstration videos.

Complete what you can - as long as you have tried your best!

Answers are in a separate pack.

The Wright Brothers

Who Were the Wright Brothers?

Wilbur and Orville Wright were famous designers and inventors who grew up in Ohio, USA. Wilbur was born in 1867 and Orville was born years later in 1871. They are famous for being the first people to build and fly an aeroplane powered by an engine.

What Was Their Early Life Like?

Wilbur and Orville's father encouraged them to read lots of books and learn more about the world. He enjoyed thinking carefully about things and taught his children to do the same. Instead of going to university, Orville spent several summers learning the printing trade and, together, the brothers opened a printing shop. The brothers were well-known in their local area for the printing presses that they designed, built and sold. In 1892, the Wright brothers opened their own bicycle sales and repair shop. They used their profits from the shop to research flying machines.

Were the Wright Brothers the First People to Fly?

Before the Wright brothers, many people had explored different ways to fly. Leonardo Da Vinci was a famous artist who drew plans for flying machines in the 1700s. However, Da Vinci's machines were never built. Otto Lilienthal was a German inventor who designed and flew the first glider. He studied the way that birds flew and built gliders with similar wings. Otto was a great inspiration to the Wright brothers.

What Was the First Aeroplane Like?

Wilbur and Orville experimented with many different designs to try to make an aeroplane fly. They realised that the design of the wings was crucial to get the plane off the ground. They built wings with different lengths, shapes and tip designs to find out which would work the best. In 1903, they designed and built an aeroplane with wings, propellers and an engine. It also had rudder to help the pilot to steer. On 17th December 1903, the aeroplane flew for 12 seconds and there were five spectators.



The Wright Brothers

What Happened after the First Flight?

After their first success, the brothers continued to build aeroplanes. By 1905, they had built an aeroplane that could fly for 39 minutes and it could even fly in circles. Wilbur and Orville became more successful while other people struggled to keep up with their designs. The brothers created aeroplanes for the US army that could fly for at least one hour with a pilot and a passenger. Years later, they opened a flight school in Ohio where pilots were trained. Modern designs of aeroplane wings are quite similar to their early sketches.

Glossary

glider	A light aircraft that flies without an engine.
printing press	A machine for printing text or pictures.
spectators	People who watch a show, game or event.



If after completing the reading comprehension, you feel that you need more practise at answering reading questions then why not visit The National Academy (Oak Academy website). There are quite a few lessons and tutorials on comprehensions.

<https://classroom.thenational.academy/subjects-by-year/year-4/subjects/english>

Questions

1. Where did the Wright brothers grow up?

- New York
- Ohio
- Florida
- Texas

2. Who designed and flew the first glider?

- Orville Wright
- Leonardo Da Vinci
- Otto Lilienthal
- Wilbur Wright

3. Draw four lines and complete the sentence.

In 1892, the brothers opened...

After the first flight, ...

They realised that the design of...

By 1905, they had built an aeroplane...

the brothers carried on building aeroplanes.

the wings was important.

their own bicycle repair shop.

that could fly for 39 minutes.

4. What did the brothers' father encourage them to do?

- Join the church.
- Go to university.
- Play a lot of sports.
- Read lots of books.

The Wright Brothers

5. Find and copy one phrase which shows that Otto Lilienthal was important to the brothers.

6. Fill in the missing words.

Wilbur and Orville became more _____ while other people
_____ to keep up with their designs.

7. Explain and compare the inventions of the Wright brothers and Otto Lilienthal.

8. Predict how flying machines might change in the future.

Grammar Task: Using direct and indirect speech.

<https://classroom.thenational.academy/lessons/news-report-spag-focus-inverted-commas>

<https://www.bbc.co.uk/bitesize/topics/zvwxnb/articles/ztcp97h>

The links above will help to explain some of the rules when punctuating direct speech. It also explains direct and indirect speech.

Remember that punctuating direct speech is like creating a sandwich. Use the prompt below to help.

					
1) Open inverted commas.	2) Capital letter.	3) Speech Sentence.	4) Mark it ,.?!.	5) Close inverted commas.	6) Tell the reader who is speaking.

The Differences between Direct and Indirect Speech

Decide whether the following are examples of direct or indirect speech.

Speech	Direct or Indirect Speech?
Nervously, William asked if he could have a turn on the slide.	
"It's my turn next," Shiya shouted as she pushed past William.	
"Stop pushing in. You always do that!" Jacob called angrily.	
Dad said that the children should stop arguing and just enjoy playing together.	
Kylie mentioned that the swings were free so maybe they should go on them instead.	
"I love the park," squealed Emir as he toddled towards the swings.	

Add any missing punctuation to the sentences containing direct speech.

1. I want sweets shouted the little girl as she ran into the shop.
2. My friend called as I was walking away from the park Don't forget your bag
3. Please can you help me with my maths work asked Reuben quietly.
4. Will we ever get there whined the young child during the long car journey.

Change the indirect speech in the sentences to direct speech.

1. Alexander declared that we should all work together.

2. My sister anxiously stated that if we were late, we might miss the show.

3. My mum reassured her not to worry because there was plenty of time to get there.



Missing Punctuation

I can punctuate direct speech.

Someone has removed the speech punctuation from the extract below. Can you improve it by adding the correct punctuation?

Use these punctuation marks:

?	!	,	“ ”	.
Question mark	Exclamation mark	Comma	Inverted commas	Full stop

Don't know why you went and got yourself the lead part anyway he said Just means you have to learn more lines than anyone else and actually sing instead of just pretending to He fished my cap from underneath the art trolley and plonked it back on my head so hard that it was wedged right over my eyes Plus you're wearing tights

They're leggings I said yanking the cap up not tights Usually I didn't get that tingly feeling before a performance until I was just about to go on stage Not today; my head was already spinning

You In tights In front of all those people Unbelievable



Writing Task- From 'Up' The video clip- Doug's Special Mission.

<https://www.youtube.com/watch?v=oNL945i6qA8>



Can you create dialogue for each scene below?– think about what the characters will say to each other, they could also be saying things out loud or thinking in their head. Could you use direct and indirect speech? You can use some of the video clip to help with ideas around what the characters might say.



WAGOLL- 'What a good one looks like'

Below is an example to help you with your writing. I have built up the setting (scene) through using description, action and dialogue. I have focused on the first four.

DADWAVERS!

Description

Action

Dialogue

Where

Adverb

Verb

Estimation of time

Rhetorical Question

Simile or Metaphor

! Exclamation or onomatopoeia



Heart pounding in his chest and still feeling breathless, he continued to run on. Far ahead of him was still open-ground; the desert stretched on as far as the eye could see. Feeling somewhat alarmed that there was no hiding place yet in sight, the emu continued to run quickly - his only chance was to outrun the large, impending and ferocious monsters that had been relentlessly chasing him.

Meanwhile, Doug, who had been busily daydreaming, was blissfully unaware of the chaos that was about to descend on him.

Talking aloud to himself Doug stated, "What a wonderful day!"

He continued on his leisurely stroll admiring the beauty of the purple, delicate flowers sprouting from the ground.

"Absolutely delightful," he muttered to himself. "Have you ever seen anything so beautiful in the dusty desert?"

Just as Doug was thinking his happy thoughts, the emu jumped over him leaving Doug in bewilderment about what had just happened.

"That was close! Far too close," the emu muttered to himself and hurried even further out of sight of the terrifying, bloodthirsty beasts.

Crash, bang, wallop - legs were caught up everywhere!

"Look what you have done you clumsy fool!" barked the leader of the pack to the dog.

Behind the rocks, a confused and dazed Doug began to ponder what had just happened.

Things that make this a good piece of writing. Below are some examples of things that have been included in this piece.

- Show not tell: 'heart pounding in his chest' implies both fear and tiredness from the running. This is better than saying 'he was tired as he was running' as it has more impact.
- Different sentence openers: sometimes verbs are used (for example, 'talking'), adverbs (absolutely) determiners (the), pronouns (he). Try to vary your sentence starters.
- Use of adverbs throughout to add interest: for example, blissfully, relentlessly, and slightly.
- Powerful verb choices and not always using said when using dialogue-
stated, muttered
- Prepositional phrases: behind the rocks
- Adjectives for impact: such as terrifying, blood-thirsty.

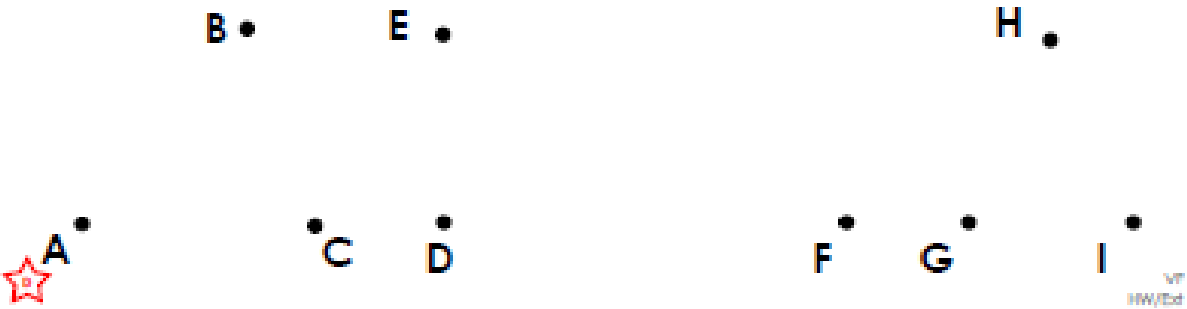
This section is all about angles. If you would like more help on understanding different triangles please use the website links. <https://classroom.thenational.academy/subjects-by-year/year-4/subjects/maths> Look under the headings shape and symmetry lessons 8, 9 and 10 will probably be the most helpful.

One Star

Triangles

1. Tick the true statements. You can use a ruler to help you.

- A. Connecting ABC will make an equilateral triangle.
- B. Connecting DEF will make a scalene triangle.
- C. Connecting GHI will make an isosceles triangle.



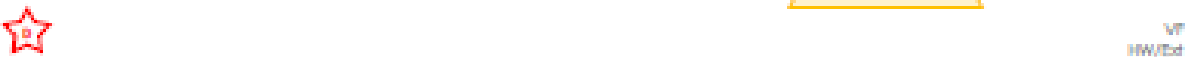
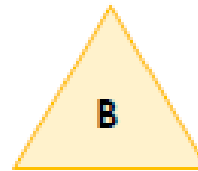
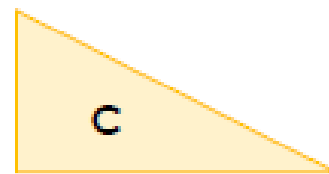
2. Match the triangle to its type.

Right angled

Scalene

Isosceles

Equilateral



3. Tick the triangles which could be made using these lines. Convince me. You can use a ruler to help you.

Equilateral

Isosceles

Scalene



A _____

B _____

C _____

D _____



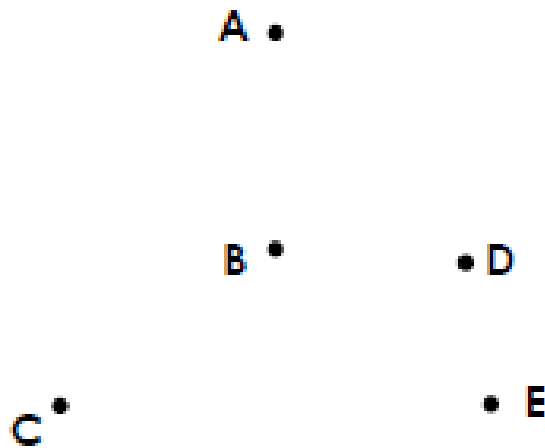
Triangles

4. Tick the statements which are true.

A. Connecting BCE will make an isosceles triangle.

B. Connecting DCE will make a right angled triangle.

C. Connecting ACE will make an equilateral triangle.



VP
HW/Ed

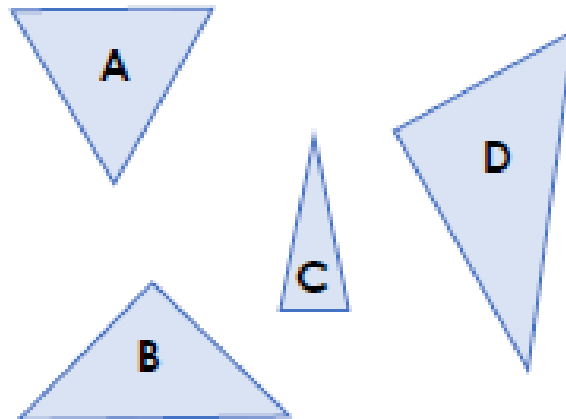
5. Match the triangle to its type.

Right angled

Scalene

Isosceles

Equilateral



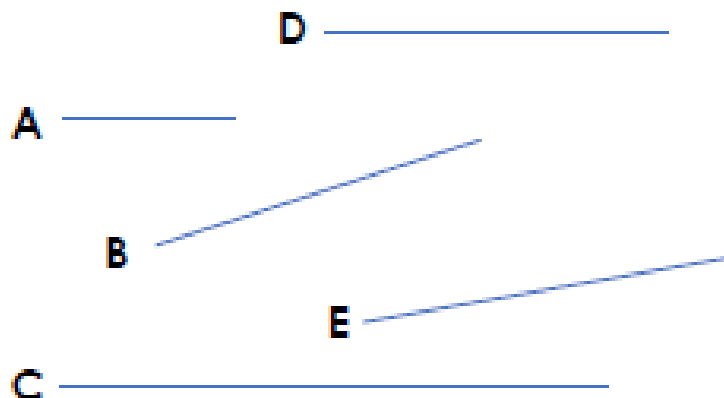
VP
HW/Ed

6. Tick the triangles which could be made using these lines. Convince me.

Equilateral

Isosceles

Scalene



EPS
HW/Ed

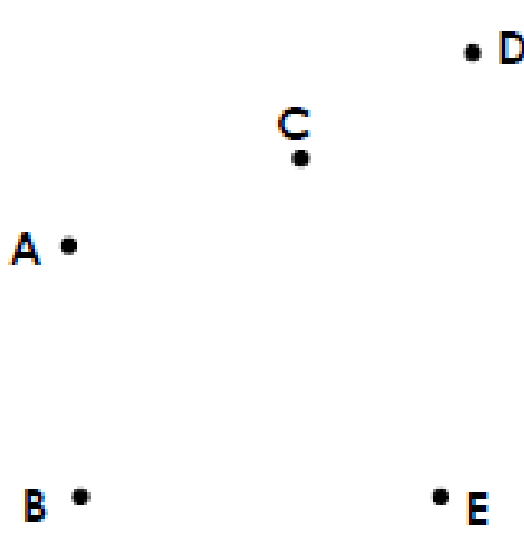
Triangles

7. Tick the statements which are true.

A. Connecting ABC will make a scalene triangle.

B. Connecting ACE will make an isosceles triangle.

C. Connecting ADE will make an equilateral triangle.



VP
HW/Ed

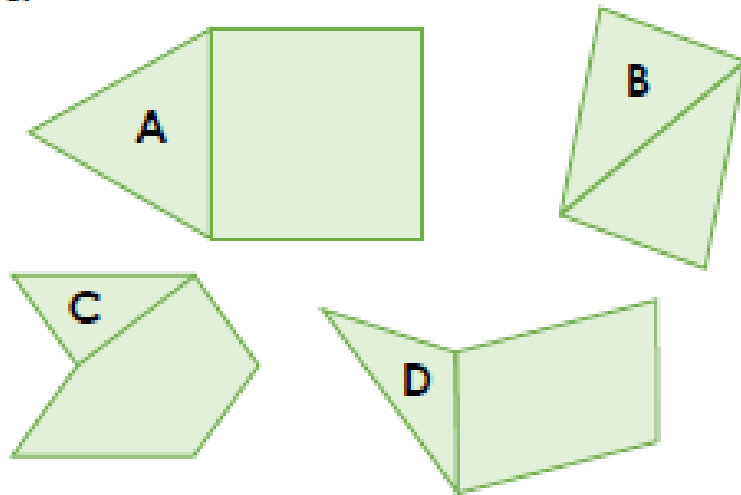
8. Match the triangle to its type.

Right angled

Scalene

Isosceles

Equilateral



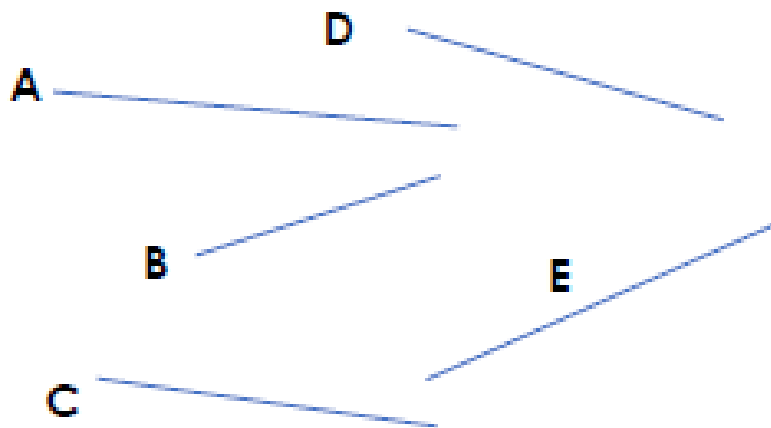
VP
HW/Ed

9. Tick the triangles which could be made using these lines. Convince me.

Equilateral

Isosceles

Scalene



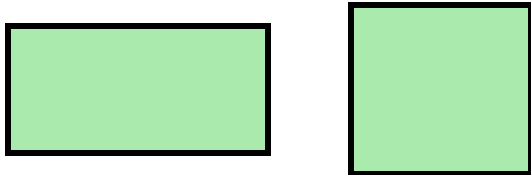
VP
HW/Ed

One Star

Quadrilaterals

Quadrilaterals

1a. What is the same about these two shapes? What is different?



R



R

2a. Amy is thinking of a shape. It has:

- 4 sides
- 4 right angles

What shapes could Amy be thinking of? Give all possible answers.



PS



PS

3a. Halima thinks that the shape matches her statement. Is she correct? Explain your answer.



This quadrilateral has 2 right angles.

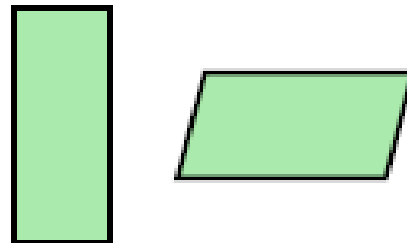


R



R

1b. What is the same about these two shapes? What is different?



R

2b. Terry is thinking of a shape. It has:

- 4 sides
- 2 pairs of parallel sides
- No right angles

What shape could Terry be thinking of? Give all possible answers.



PS

3b. Yao thinks that the shape matches his statement. Is he correct? Explain your answer.

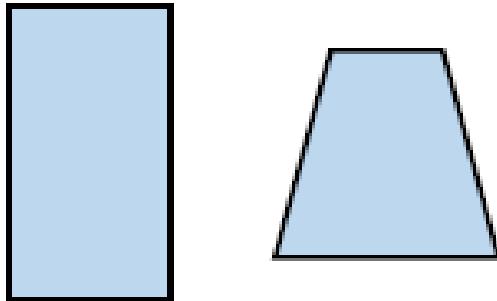
This quadrilateral has all equal length sides and 4 right angles.



R

Quadrilaterals

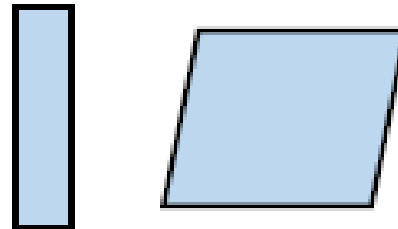
4a. What is the same about these two shapes? What is different?



R

Quadrilaterals

4b. What is the same about these two shapes? What is different?



R

5a. Sunita is thinking of a shape. It has:

- 4 sides
- 2 or more right angles

What shapes could Sunita be thinking of?
Give all possible answers.



PS

5b. Kyle is thinking of a shape. It has:

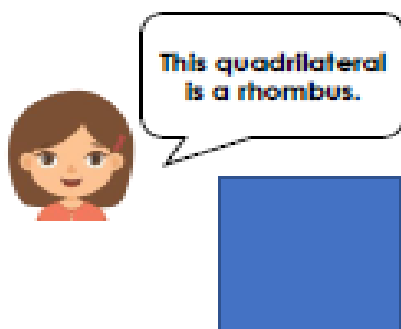
- 4 sides
- 1 pair of parallel lines
- No right angles

What shape could Kyle be thinking of?
Give all possible answers.



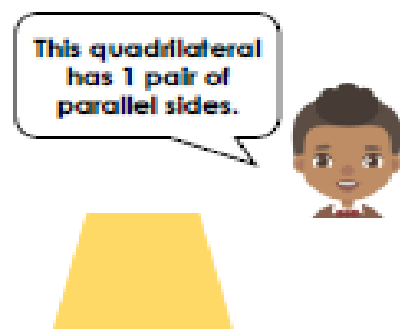
PS

6a. Tilly thinks that the shape matches her statement. Is she correct? Explain your answer.



R

6b. Kaleb thinks that the shape matches his statement. Is he correct? Explain your answer.

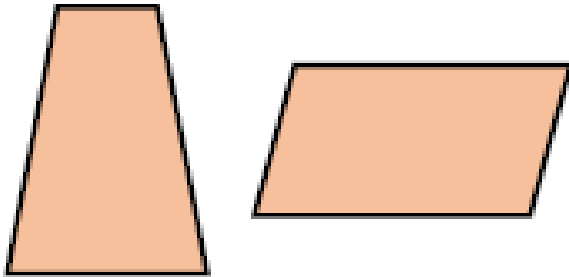


R

Quadrilaterals

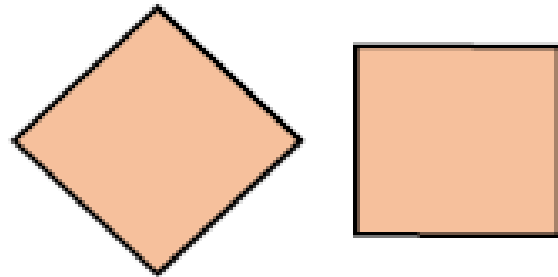
Quadrilaterals

7a. What is the same about these two shapes? What is different?



R

7b. What is the same about these two shapes? What is different?



R

8a. Vicky is thinking of a shape. It has:

- 4 sides
- 1 set of parallel sides

What shape could Vicky be thinking of?
Give all possible answers.



PS

8b. Dev is thinking of a shape. It has:

- 4 sides
- No right angles

What shape could Dev be thinking of?
Give all possible answers.



PS

9a. Sophie thinks that the shape matches her statement. Is she correct? Explain your answer.



This shape is a regular quadrilateral.



R

9b. Robert thinks that the shape matches his statement. Is he correct? Explain your answer.

This shape has 2 pairs of parallel sides.



R

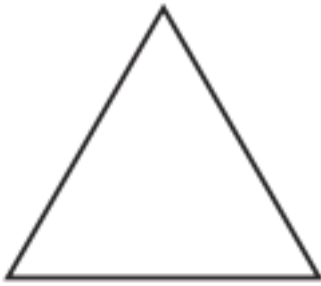
Maths Task:

Write a mathematical description of each shape. Use some of the following words to help you:

- Sides
- Edges
- Corners
- Vertices
- 2-dimensional
- Angles
- Right angles
- Acute angles
- Obtuse angles
- Parallel lines
- Perpendicular lines
- Curved
- Straight
- Regular
- Irregular
- Polygon
- Equal
- Adjacent sides (next to each other)

Properties of 2D shapes.

One Star:



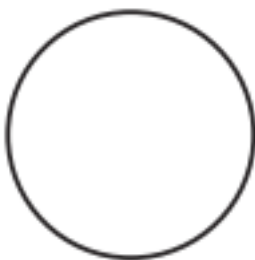
What are the properties of an equilateral triangle?



What are the properties of a rectangle?

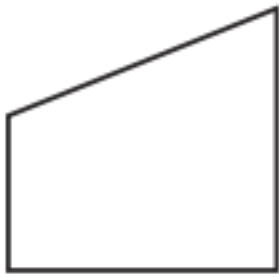


What are the properties of a square?



What are the properties of a circle?

Two Star:



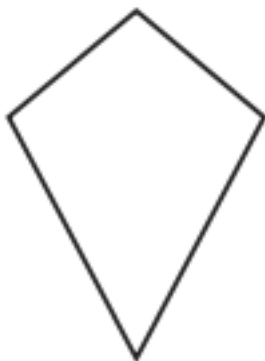
What are the properties of a quadrilateral?



What are the properties of an isosceles triangle?



What are the properties of a parallelogram?



What are the properties of a kite?

Three Star:

True or false? Explain your answer.

1. Every square is a rectangle.
2. Every rectangle is a square.
3. Every square is a rhombus.
4. Every rhombus is a square.
5. Every parallelogram is a rectangle.
6. A scalene triangle has no equal sides.
7. An isosceles triangle has three equal sides.
8. A parallelogram is a polygon whose opposite sides are parallel.
9. A rectangle is a parallelogram with four right angles.
10. An isosceles triangle is a triangle which has exactly two sides with equal length.
11. All parallelograms are quadrilaterals.
12. All parallelograms are rectangles.