

Year 3

# Light Test 1 (diagnostic)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

1. Look at your pencil. How can you see it?

KU

1 mark

2. Only mirrors reflect light. Circle your answer.

true

false

Explain why.

KU

1 mark

3. How could you test sunglasses to find out which are the darkest?

AWS

2 marks

4. You should never look straight at the sun. Why? Tick one answer.

It is too bright.

It is too hot.

It is too high.

KU

1 mark

5. Draw lines to match the objects to their shadows.



A

6. Complete the sentence below.

You get a shadow when \_\_\_\_\_

KU

1 mark

7. a) Shadows change size during a sunny day.

How could you measure them?

AWS

1 mark

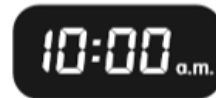
b) Which units would you use to measure the size of the shadows?

AWS

1 mark

8. At what time of day are shadows outdoors the shortest?

Circle your answer.

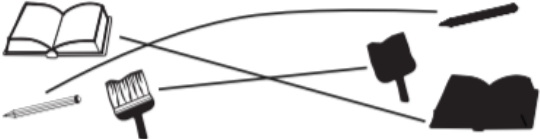


KU

1 mark

# Answers and mark schemes

## Year 3 Light

Test 1 (diagnostic)	Area	Mark	Extra information
1. Light is reflected off the pencil and into your eyes.	KU	1	Allow that light bounces off the pencil, but there must be an indication of reflection.
2. False We need light to see objects, so other objects reflect light as well as mirrors.	KU	1	1 mark for 'false' plus explanation
3. Describe a test, e.g. shining a torch through a lens and comparing the light shone onto paper (through different sunglasses).	A/WS	2	1 mark for setting up the experiment 1 mark for comparison
4. It is too bright.	KU	1	
5. 	A	1	All three correctly matched
6. an object blocks the light.	KU	1	
7a. Use a ruler or tape measure.	A/WS	1	
7b. Centimetres or metres	A/WS	1	
8. 12:00 p.m.	KU	1	

Year 3  
**Forces and magnets Test 3 (end of topic)**

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

1. Fill in the missing word.  
Forces can be pushes or \_\_\_\_\_.

KU  
  
1 mark

2. a) Tom pushes his train along the floor.  
Will it stop quickly or slowly on rough carpet?  
Circle the correct answer.

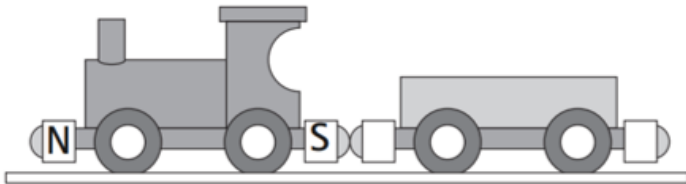
quickly                      slowly

A  
  
1 mark

- b) When the train is pushed along smooth wood it travels further. Why?

A  
  
1 mark

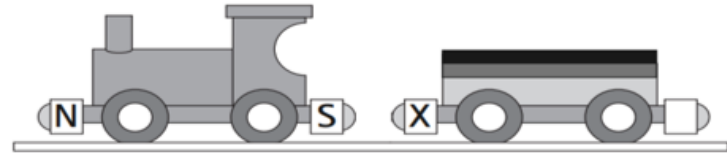
3. Tom's train uses magnets to join the trucks to the engine.



- a) Label the magnet poles on the truck when it is attracted to the engine.

KU  
  
1 mark

- b) Tom places a different truck next to the engine.



How could you tell if the magnetic pole marked 'X' was a north pole or a south pole?

\_\_\_\_\_

AWS

4. Sam is playing with magnets.

- a) He brings a metal spoon near a magnet. It jumps on to the magnet.  
What do you think the spoon is made of? Circle the correct answer.

plastic                      wood                      steel                      copper

KU  
  
1 mark

- b) He brings a wooden spoon near to the magnet. What will happen?

\_\_\_\_\_

\_\_\_\_\_

KU  
  
1 mark

# Answers and mark schemes

## Year 3 Forces and magnets

Test 3 (end of topic)	Area	Mark	Extra information				
<b>1.</b> Pulls	KU	1					
<b>2a.</b> Quickly	A	1					
<b>2b.</b> There is less friction between the wheels and the wood than carpet.	A	1					
<b>3a.</b> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>N</td><td>S</td></tr></table> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>N</td><td>S</td></tr></table>	N	S	N	S	KU	1	
N	S						
N	S						
<b>3b.</b> If it is a north pole it will be attracted to the engine and if it is a south pole it will be repelled.	A/WS	1	1 mark for both points				
<b>4a.</b> Steel	KU	1					
<b>4b.</b> The wooden spoon would not be attracted as it is not magnetic.	KU	1					