

Name:

Date:

Science Assessment Year 3: Light

Light and Dark

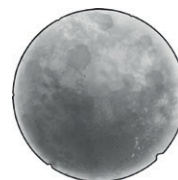
1. Circle all the things that are a light source.



a window



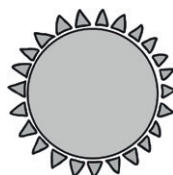
a mirror



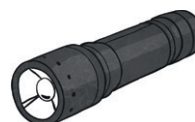
the Moon



a candle



the Sun



a torch

2. What is dark?

.....

3. Fill in the blank space in this sentence:

Light travels in a line from a light source to an object.

4. What happens to the pupil in your eye if a room gets darker?

.....

.....

Using Light

5. What happens if you shine a torch on a shiny surface?

.....

.....

3 marks

1 mark

1 mark

1 mark

1 mark

Total for
this page

6. Why do you think road signs are made out of reflective material?

.....

.....

1 mark

7. Write **true** or **false** for these statements:

Statement	True or False
Light reflects better off rough surfaces	
Cats' Eyes on roads reflect car headlights	
The Sun helps people make vitamin D	
We can see UV light	

3 marks

8. Name the colours in the visible spectrum.

.....

.....

4 marks

9. Name **two** dangers of UV light.

.....

.....

1 mark

10. Explain **one** situation when UV light is stronger.

.....

.....

1 mark

11. Why should you **never** look directly at the sun or other bright lights?

.....

.....

1 mark

Total for
this page

12. Think about protecting yourself from UV rays. What can you do to protect these things:

a) Your eyes:

.....

b) Your skin:

.....

1 mark

1 mark

Shadows

13. Join up these words to the correct explanation:

Word

Explanation

Transparent

Lets **some** light pass through but you can't see clearly through it.

Translucent

Does not let light pass through at all.

Opaque

You can see clearly all the way through.

2 marks

14. Explain how a shadow is made:

.....

.....

.....

2 marks

15. How do you make a shadow bigger?

.....

.....

1 mark

Total for this page

Answer Sheet: Science Assessment Year 3:

Light



question	answer	marks	notes										
1. Circle all the things that are a light source.													
a	Candle, The Sun, A Torch	3	0 for 0 or 1 out of 6 correct 1 for 2 or 3 out of 6 correct 2 for 4 or 5 out of 6 correct 3 for all 6 correct Accept circles, ticks or any positive form of identification. Accept crossed out or left blank for negatives.										
2. What is dark?													
	<ul style="list-style-type: none">(the) absence of lightWhere there are no light sourcesWhere there is no light.	1	1 mark for a correct answer.										
3. Fill in the blank space in this sentence:													
	Light travels in a straight line from a light source to an object.	1	1 mark for the correct answer.										
4. What happens to the pupil in your eye if a room gets darker?													
	<ul style="list-style-type: none">It gets bigger /enlarges	1	1 mark for the correct answer.										
5. What happens if you shine a torch on a shiny surface?													
	<ul style="list-style-type: none">it reflects the light	1	1 mark for the correct answer. Do not accept only that it 'lights it up'.										
6. Why do you think road signs are made out of reflective material?													
	<ul style="list-style-type: none">Car headlights shine on themDark/at nightSo they can be seen in the dark	1	1 mark for answers that include all correct information.										
7. Write true or false for these statements.													
	<table><tr><th>Statement</th><th>True or False</th></tr><tr><td>Light reflects better off rough surfaces</td><td>False</td></tr><tr><td>Cats' Eyes on roads reflect car headlights</td><td>True</td></tr><tr><td>The Sun helps people make vitamin D</td><td>True</td></tr><tr><td>We can see UV light</td><td>False</td></tr></table>	Statement	True or False	Light reflects better off rough surfaces	False	Cats' Eyes on roads reflect car headlights	True	The Sun helps people make vitamin D	True	We can see UV light	False	3	Maximum 3 marks 0 for 0 or 1 correct 1 for 2 correct 2 for 3 correct 3 for all 4 correct
Statement	True or False												
Light reflects better off rough surfaces	False												
Cats' Eyes on roads reflect car headlights	True												
The Sun helps people make vitamin D	True												
We can see UV light	False												

question	answer	marks	notes
8. Name the colours in the visible spectrum.			
	<ul style="list-style-type: none"> • Red • Orange • Yellow • Green • Blue • Indigo • Violet 	4	Maximum 4 marks 0 for 0-1 correct 1 for 2 or 3 correct 3 for 4, 5 or 6 correct 4 marks for all the colours (in any order).
9. Name two dangers of UV light.			
	<ul style="list-style-type: none"> • sun burn • wrinkles • skin cancer • damages the eyes • can change the colour of some materials 	1	1 mark for any two correct answers.
10. Explain when UV light is stronger.			
	<ul style="list-style-type: none"> • at midday • in Summer • If there are no clouds • nearer to the equator • water, sand and snow all reflect UV light, making it stronger. 	1	1 mark for any one correct answer.
11. Why should you never look directly at the sun or other bright lights?			
	<ul style="list-style-type: none"> • It can damage your eyes 	1	1 mark for the correct answer.
12. Think about protecting yourself from UV rays. What can you do to protect these things:			
	Your eyes: Wear sunglasses (with UV rating) Wear a cap / wide-brimmed hat Have regular eye tests Don't look directly at bright lights Your skin: Wear (high factor) sunscreen Wear sunblock Wear clothes that cover shoulders and more of the body Spend time in the shade Don't go out in the sun when it's at its hottest	2	Maximum 2 marks 1 mark for a correct answer. 1 mark for a correct answer.

question	answer	marks	notes								
13. Join up these words to the correct explanation.											
	<table><thead><tr><th>Word</th><th>Explanation</th></tr></thead><tbody><tr><td>Transparent</td><td>Lets some light pass through but you can't see clearly through it.</td></tr><tr><td>Translucent</td><td>Does not let light pass through at all.</td></tr><tr><td>Opaque</td><td>You can see clearly all the way through.</td></tr></tbody></table>	Word	Explanation	Transparent	Lets some light pass through but you can't see clearly through it.	Translucent	Does not let light pass through at all.	Opaque	You can see clearly all the way through.	2	Maximum 2 marks 0 marks for 0-1 correct 1 mark for 2 correct 2 marks for 3 correct
Word	Explanation										
Transparent	Lets some light pass through but you can't see clearly through it.										
Translucent	Does not let light pass through at all.										
Opaque	You can see clearly all the way through.										
14. Explain how a shadow is made.											
	<ul style="list-style-type: none">• An opaque object.• Blocking the light rays.	2	2 marks for both correct answers. Key words in capitals must be mentioned.								
15. How do you make a shadow bigger?											
	<ul style="list-style-type: none">• Move the object nearer the light source.• Move the surface where the shadow is projected further away from the light source.	1	1 mark for a correct answer.								
		total 25									