Name: Class:

Student worksheet

4.8 Different wavelengths of light are different colours

Pages 84–85 and 201

Visible light is colour

1 What is dispersion?

_____

_____

2 Which colours does white light separate into? How can you remember these?

_____

_____

3 What is unique about each colour?

_____

_____

4 What is this range of colours called?

_____

_____

5 What are primary colours?

_____

_____

6 What are secondary colours?

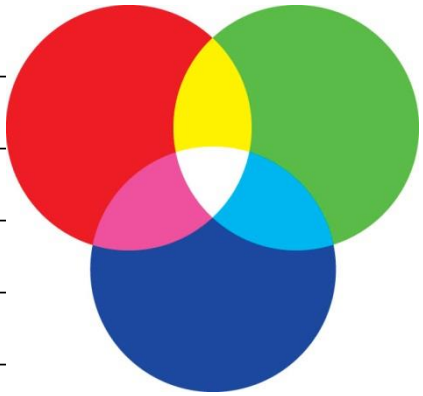
_____

_____

© Oxford University Press 2017
Oxford Science 9 Western Australian Curriculum Teacher obook assess ISBN 9780190307233
Permission has been granted for this page to be photocopied within the purchasing institution only.

Name: Class:

7 What are complimentary colours of light? How would you create them? Use the colour diagram to help you explain this.



_____

_____

_____

_____

_____

8 Which colours would you add to make white light if you started with the following:

a red

_____

b blue

_____

c green

_____

d yellow

_____

e cyan

_____

f magenta

_____

9 Why do the leaves of plants appear green?

_____

_____

10 Your boss hires you to grow a crop of plants and wants you to use optimal abiotic conditions only. What light would you use?

_____

© Oxford University Press 2017
Oxford Science 9 Western Australian Curriculum Teacher obook assess ISBN 9780190307233
Permission has been granted for this page to be photocopied within the purchasing institution only.

Name: Class:

11 Determine which colours are absorbed and transmitted by cellophane which is coloured:

a blue

b magenta

c cyan

d green

Extend your understanding

12 At some point in your life, someone has probably told you that the sky is blue because if reflects the ocean, but this is not correct. Using the knowledge you have gained from pages 84 and 85, explain why the sky is blue.

13 Just as the sky is blue, a sunset appears red. Using the knowledge you have gained from pages 84 and 85, explain why a sunset is red.

© Oxford University Press 2017
Oxford Science 9 Western Australian Curriculum Teacher obook assess ISBN 9780190307233
Permission has been granted for this page to be photocopied within the purchasing institution only.