

Formal Formative 2-

Topics: 5.1-5.3

Total Marks: 25

1. Carlos has some CDs and a candle and decide to do an experiment. /6

- First, he stacks the CDs so that the holes line up, and then he looks down through the CDs to see if he is able to see the candle below.
- Then, he stacks the CDs so that the holes are not aligned and looks down through the CDs to see if he is able to see the candle below.



Circle the correct words to complete the sentences below.

When the holes in the CD are lined up, Carlos **can/cannot** see the candle through the CDs. When the holes in the CDs are not lined up, Carlos **can/cannot** see the candle through the CDs.

This happens because light **can bend/can only travel in straight lines**. When the holes **are lined up/are not lined up**, light from the candle travels directly through and into Carlos' eyes.

When the holes **are lined up/are not lined up**, the light from the candle is reflected off the bottom of the CDs and **will / will not** reach Carlos' eyes.



2. The fire is one source of light in this picture.
- Identify the other sources of light in this picture. /1

 - Light from the campfire allows the owl to see the guitar. Draw a ray diagram on the above given picture to show this. Label the arriving and reflected ray. /3

3. The frog is looking at his reflection in the pond.

Fill in the blanks.

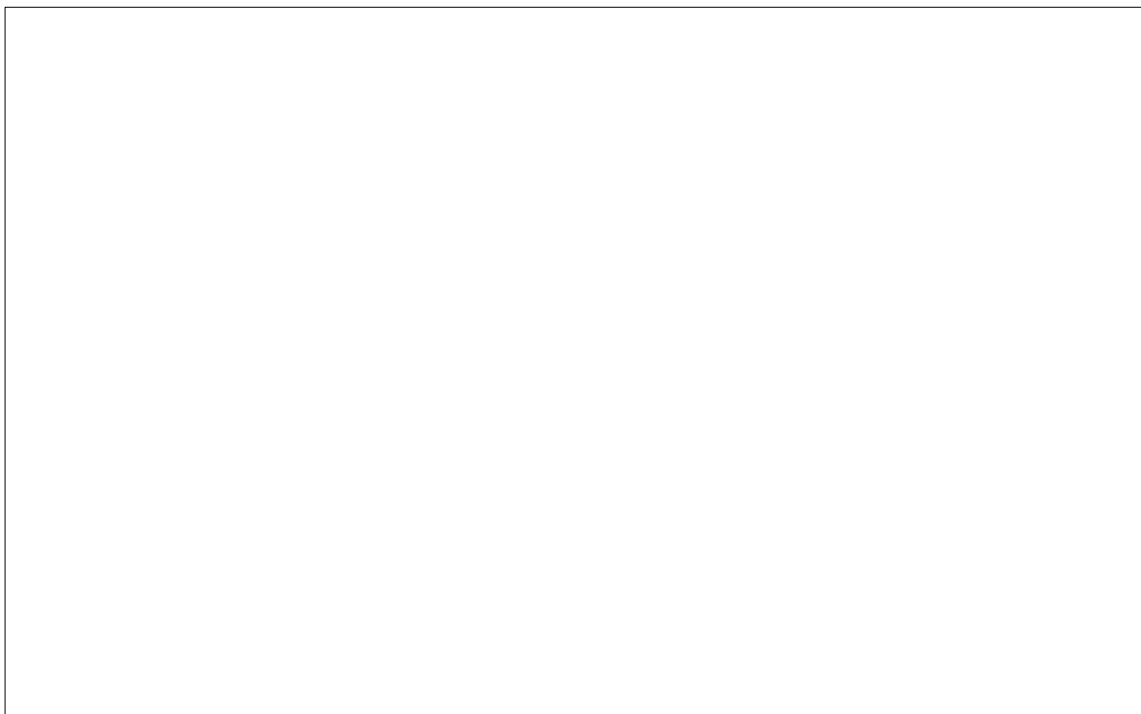


- Another word for the reflected picture is _____ /1
- The frog can see his reflection in the pond because the surface of the water is _____ and _____ /2
- Imagine that it is a windy day, and suddenly there are lots of waves and ripples on the surface of the pond. Would the frog still be able to see his reflection clearly like before? Explain why, or why not. /2

4. Granny is sitting in a chair doing some knitting. There is a basket of wool by her feet. Also, there is a tall lamp shining on Granny.

a. Draw what the passage describes.

/2



b. What is the light source described in this passage.

/1

c. Name the object or objects Granny is trying to see.

/1

d. On the image you have drawn, draw arrows to show how Granny can see the basket of wool. Label the arriving and the reflecting ray.

/2

5. Classify the following surfaces as either reflective surfaces or non-reflective. /4

Paper, Mirror, Wood, Wool, Polished marble, Clear water, Muddy water, Metallic plate.

Reflective Surfaces	Non-reflective Surfaces