Learning Activity

alloprof
Head to alloprof.ca/en
for more ressources

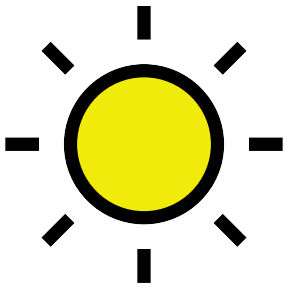
Name: _____

Group: _____

Date: _____

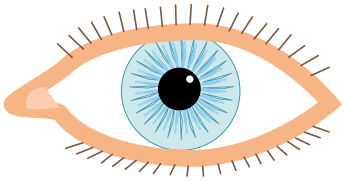
Science and Technology
Grades 5 and 6

Spotlight on Diagrams



Student booklet

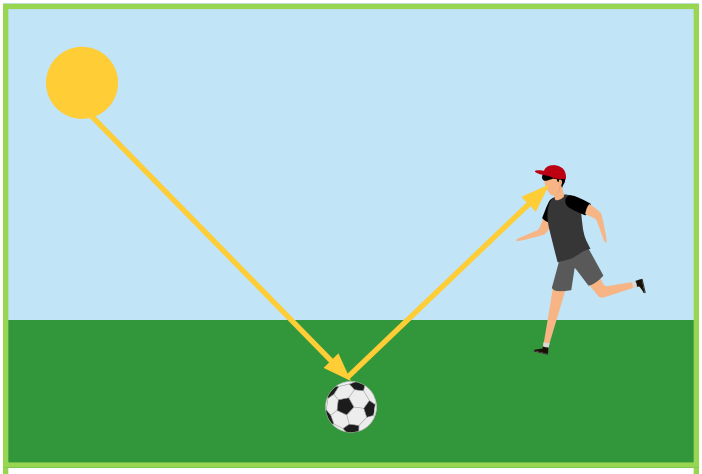
Eyes and Light



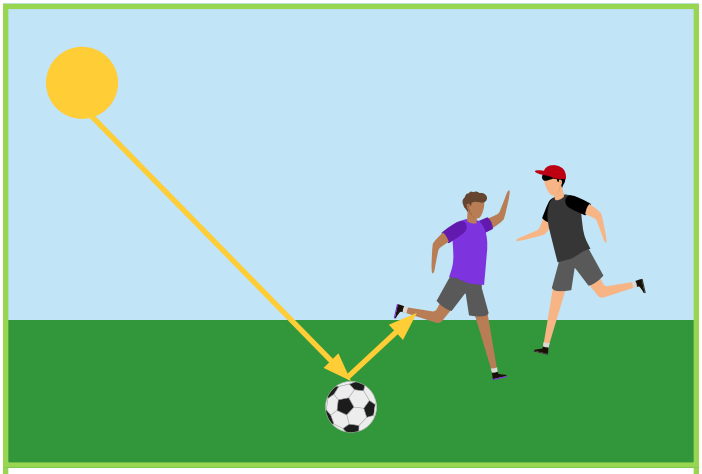
Your **eyes** are the organs that allow you to see. But that's only possible in the presence of **light**!

You can't see anything in complete darkness, because there's no light reaching your eyes.

That means you can only see an object under **both** of the following conditions:
- The object emits light, or reflects light from another source.
- The emitted or reflected light reaches your eyes.



The light emitted by the sun reaches the ball. Some of that light is reflected and reaches the player's eyes.



The light reflected by the ball doesn't reach the eyes of the player in the black jersey, because the player in the purple jersey is blocking the light.

Watch the demonstration closely before you continue!

Describe what you've just observed in your own words.

_____

_____

_____

_____

What is this phenomenon called? _____

To better understand this phenomenon, you can draw a **diagram**!

What is a diagram?

A **diagram** is a drawing with many different uses. For example, it can be used to represent and better understand a scientific phenomenon.

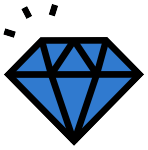
A diagram can also be a way to represent something that is not visible.

Identify something that is not visible in the phenomenon you observed.

You can represent light with arrows. (Of course, these arrows aren't real: they're only to help you better understand the behaviour of light.)

To create a diagram, you should follow a few rules.

- Add a **title** at the top of the diagram.
- Keep the design **clean** and **simple**.
  - Don't add elements just to make it look nice.
  - Use a ruler to draw straight lines.
- Add a **legend** if needed.



Here are two examples of diagrams.

Diagram 1. The coin is visible when I'm near the bowl

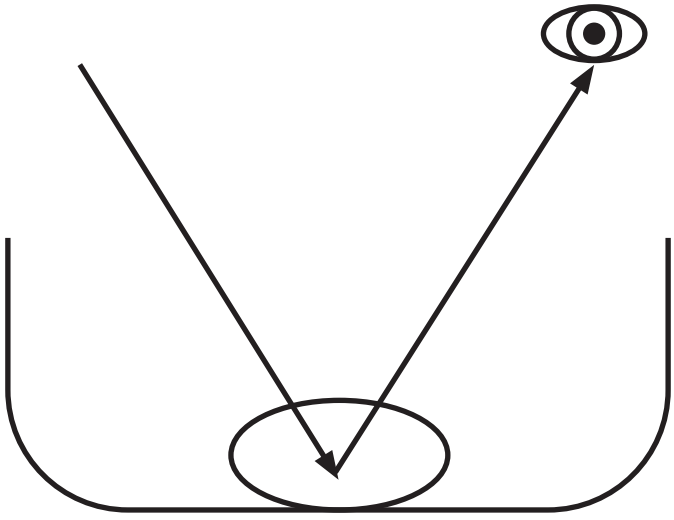
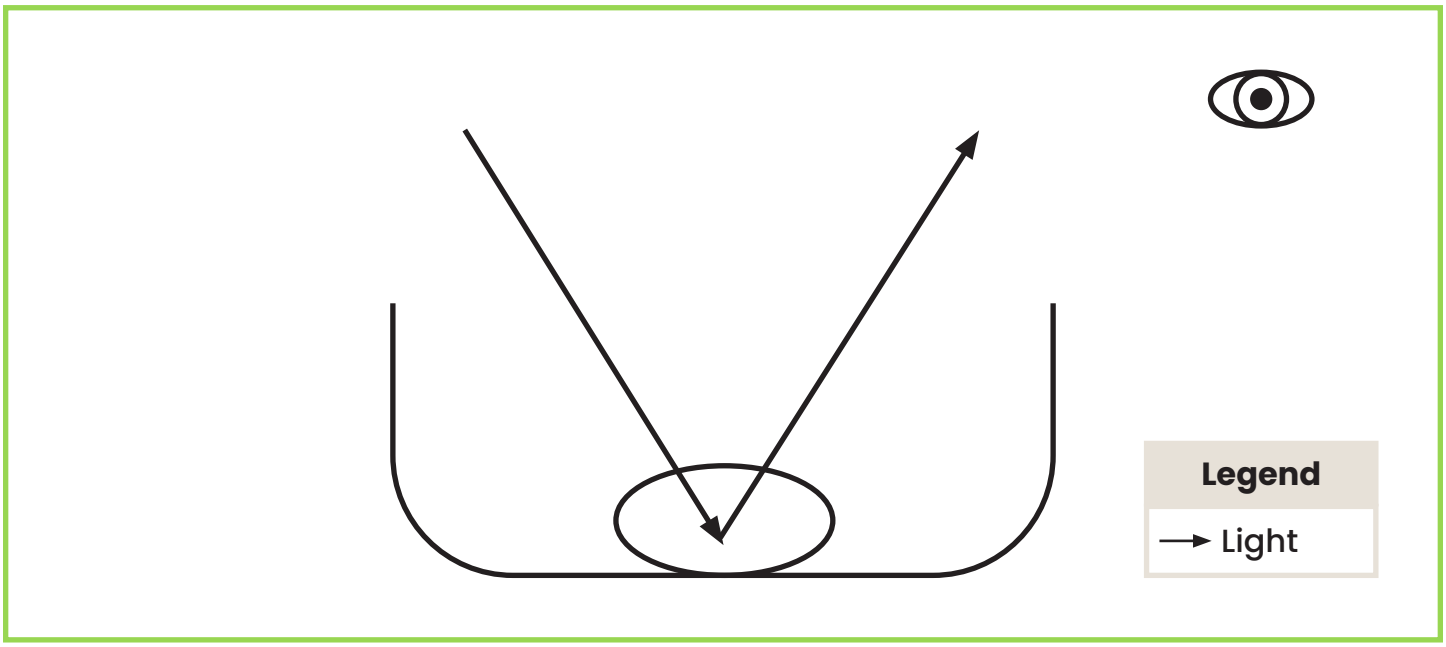


Diagram 2. The coin is not visible if I'm far away from the bowl



Now that you know more about diagrams, it's your turn to make one!

Use a diagram to show what happened when your teacher added water to the bowl.

Explain in your own words how you represented the refraction of the light.