



Amazing Arrow

I can investigate the effects of refraction.

I can understand the way refraction alters the direction of light.



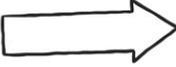
On a small piece of paper, draw a horizontal arrow.

You will hold it behind a glass of water and observe what happens.

What do you predict will happen?

Try it out! Draw and write about what you observe.

Can you explain what happened? Use the words and phrases below to explain your ideas.

light 	bend 	turn 	glass 	water 	arrow 
travel	I noticed..	I think...	This is because...	It happened because...	This made...



Incredible Images



Draw a small picture on a piece of paper, for example a smiley face or star.

Then you will place an empty glass over the top of the picture, and look at your image through the side of the glass.

As you watch your picture, slowly fill the glass with water.

When the glass is full, you should cover the top of the glass with a saucer.

What do you predict will happen?

Try it out! Draw and write about what you observe.

Can you explain what happened? Use the words and phrases below to explain your ideas.

light 	bend 	picture 	glass 	water 	saucer 
travel	disappear	I think...	This is because...	I noticed..	This made...
