

# SHADOW INVESTIGATION

Have you ever noticed how shadows change over a day?  
Use this investigation to observe more closely what's happening.

## YOU WILL NEED:

a two pencils, a ball of blu tack or play dough, a piece of paper or chalk (to draw on the path), a ruler or tape measure, a sunny day!

You could use a tree or something else that causes a shadow instead of a pencil and blu tack, if available in your garden.

## INSTRUCTIONS:

1. Find a sunny spot outside or on a large windowsill.
  2. Place the pencil so that it is standing upright in the ball of blu tack or playdough and place it on top of the piece of paper or on a path or concrete that you can draw on with chalk. Make sure that a shadow is created.
- 
3. Draw around the shadow using a pencil, or chalk if drawing straight onto a path (miss out this step if your shadow is on grass or an area that you cannot draw on).
  4. Measure the length of the shadow and record in the results table, including the time that you measured the shadow.
  5. Leave the pencil (or other object creating the shadow) where it is and return to draw and measure the shadow at different times throughout the day.

PREDICTION: WHAT DO YOU THINK WILL HAPPEN TO THE SHADOW?

---

---

---

RESULTS

Time:						
Length of Shadow (in cms):						

OBSERVATIONS: WHAT HAVE YOU NOTICED USING YOUR RESULTS AND TABLE AND YOUR DRAWINGS OF SHADOWS?

---

---

---

CONCLUSION: WHAT HAVE YOU FOUND OUT?

---

---

---