In science, we need to make a lot of careful observations. Observations are what we can say about things we see, hear, smell, taste and touch. We can also use measuring equipment to help us with observations. How would you describe a platypus to someone who had never seen one before?

Some observations could be:
- It has a bill like a duck and webbed feet
- Its fur feels smooth
- It tastes like kangaroo
- It sniffs like a dog
- The one we saw was 32 cm long

When a platypus was first taken to Europe, the scientists who saw it thought that the people in Australia were trying to play a trick on them. They believed the people in Australia had sown a duck’s beak onto a beaver. They didn’t take the time to make good observations.

Some statements that are not good observations are:
- It has a duck’s bill sown on to it.
- It is a type of dog
- It must be a marsupial
- It probably is able to swim

You will be doing an experiment that requires you to make good observations. Experiments help us find out more about our world. You need to find out as much as you can about heating popcorn. Make as many good observations as you can, both before and after popping. Look for patterns in your observations. This will help you make good predictions later. Remember: be clean, be safe.

**Experiment: Pop the corn**

- Small tin can, with 20 kernels of corn
- Bunsen Burner
- Matches
- Tripod
- Bench protector
- Gauze mat
- Safety glasses

**Method:**
1. Make as many observations about the unpopped corn as possible.
2. Place the tin can with the corn kernels on the gauze mat. Light the Bunsen burner, and begin heating on a blue flame.
3. Use every sense, except taste, to make observations from the time you start to heat. Take care!
4. Clean up thoroughly.

**Structured Overview**

| Keywords |  |  |
|----------|  |  |
| Meaning in context |  |  |
| Line no. |  |  |
Part A  Think About It

1. Why didn’t English scientists believe that the Platypus was a real animal?

2. Why must you use a blue flame to heat the tin can?

3. Why can’t you use your sense of taste in this experiment?

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Popcorn Observation Experiment

1. Make a list of the equipment that you will be using in this experiment .................................................................

2. Write your observations before popping the corn, during, and then after.

<table>
<thead>
<tr>
<th>Observations</th>
<th>Before popping</th>
<th>During popping</th>
<th>After popping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight</td>
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<tr>
<td>Hearing</td>
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<td>Touch</td>
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3. What pattern did you notice in the popping? .................................................................

4. What would you predict would happen to another twenty pieces of popcorn, based on this pattern you have observed? .................................................................

5. Write down three questions you would like to ask having completed ‘Observations’.