

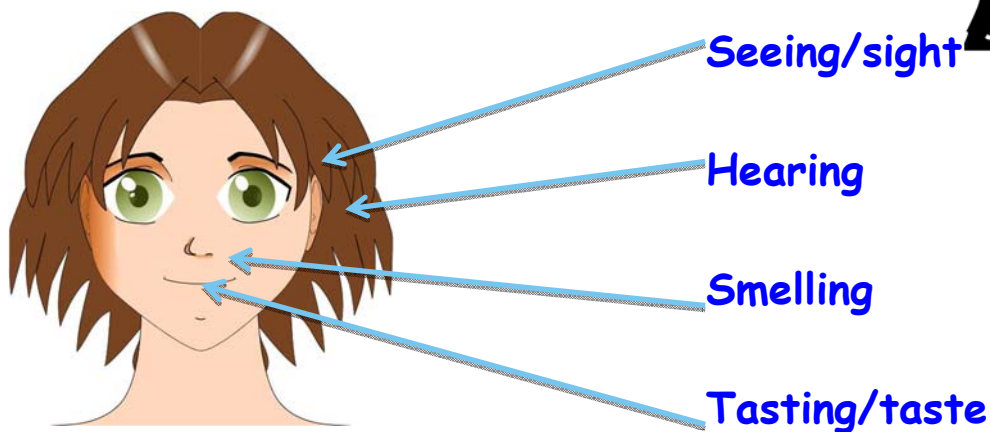


## Observing Change - Teacher Notes

An important part of Science is being able to observe changes. This suite of activities assists students to develop these skills.

### Use Your Senses

Science depends on collecting good evidence of change and finding the best way of explaining it. Our five senses tell us when something is changing in our everyday lives. They keep us informed and safe. Label the senses we use in Science below.



What sense do our hands and most of our body surfaces have?

**Touching/Feeling**



Scientists rarely test things by putting them in their mouth. It can be very dangerous. Only taste things in Science classes if your teacher has said





## Observing Change - Teacher Notes

this is safe.

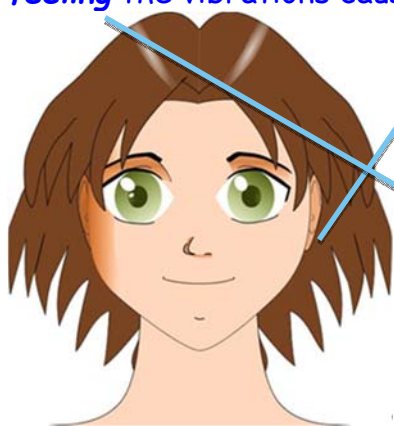
### Materials for the following activities

- A medium sized cardboard box or a tea towel to conceal things.
- Two sheets of newspaper and sticky tape to make mystery packages.
- A pencil and pencil sharpener.
- A bell or whistle.
- Half an onion and half an orange. Optional: hammer or heavy object.
- Opaque plastic bags or newspaper to wrap things.
- Some small objects such as a potato, an apple, a rock, a crayon or small toy, such as a plastic dinosaur, hidden in sealed opaque plastic bags.

### Stomping Senses

Students should have their eyes shut. Select someone to stomp from one side of the classroom to the other. Students should feel the sound vibrations travelling through the floor through their buttocks and hear those travelling through the air to their ears.

What senses did you use to detect these changes? Use the picture below to circle the senses you used. **Hearing and, with a resonant wooden floor feeling the vibrations caused by the stomps.**





## Observing Change - Teacher Notes

### Quick question

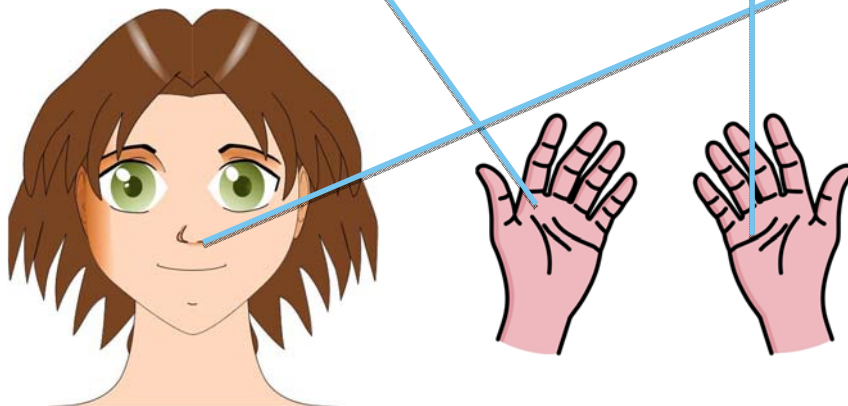
Which senses do you use to know it is almost lunchtime? **Feel** hungry, **hear** the pre-lunch announcements, **see** students being sent to collect class lunch orders and lastly **hear** the bell/siren.

### Mystery Package



The half onion and half orange should be wrapped in a double sheet of newspaper to prevent students from seeing them. If you enjoy a bit of drama give both a smash with a hammer or heavy book to release their smelly juices before giving them to the students to detect what they are.

Which senses did you use to detect what is in each of these packages? Use the picture below to mark the senses you used. **Feel** the shapes of the onion and orange, **feel** the damp from the juice from their juice and **smell** their juice.



**NOTE:** Some children with recurrent ear, nose and throat infections might not smell the orange. Therefore, in Science we always repeat an experiment many times so that our observations are not affected by unusual or





## Observing Change - Teacher Notes

"outlying" observations.

### Quick question

Which senses do you use when you put on your school clothes this morning? You need to **look** to find your clothes and then **feel** to put your arm and legs through the correct part of the garment. If the school uniform has buttons and buttonholes or zips then **looking and feeling** are also necessary to do up the garment.

### What Was That Sound?

Using a hidden bell, whistle or any other noisy object, make a noise while it is still hidden by the box (or tea towel).

Students could draw a picture of the object they think is making the sound on the accompanying worksheet. Once they are done you could reveal the object and compare it to their pictures.

### Quick question

If you are about to cross a busy road. how should you use your senses to keep yourself and others safe? If possible cross at the official road crossing with crossing guards and obey signals (**Looking/sight**). To avoid being hit by traffic, wait, **look** right look left and look right again. **Listen and look** for traffic. Some crossing signals make a beeping sound you can **hear** when it is safe to cross.

### Use All Your Senses

Place a solid object of your choice inside a sealed opaque plastic bag. Tie or staple the bag shut. It is a good idea to have a few different objects and have a different bag for each group. Students hold the bag feeling with their fingers for a count of five and then pass it on to another from their group. You may wish to have students put down words about how the object





## Observing Change - Teacher Notes

feels on the accompanying worksheet. The group then decides what is hidden in the bag.

### Student questions

Ask the students what good questions they could ask to get a better idea of what is hidden the bag (they could also write these down on their sheet, if you wish).

Colour, edible/food, play toy?

### Quick question

You are at a barbeque, are handed a pile of raw sausages and asked to place them on the grill when it is hot. How could you use your senses to do this safely? NO BURNT HANDS!

You would use "common sense" and ask an adult for help. You could see if the metal was hot if it was smoking or sizzling. *Looking and listening*. From a distance you could **look and see** if a little water would steam and sizzle if it was splashed onto the plate. Again using "common sense" you would use metal tongs to place sausages on the hot top of the barbeque.

### REVISION What have we learned?

What do we use to see change with? **Our eyes.**

What do we use to hear change with? **Our ears**

What do we use to smell change with? **Our nose**

What do we use to taste change with? **Our mouth**

What do we use to feel change with? **Our skin particularly on our hands**

We only use 4 of senses these in Science. Which one do we usually not use?

**Our mouths. Things could be hot, freezing or poisonous.**

**EXTENSION:** If you lost a sense, such as the ability to see, how would you manage to get up, get dressed, get your breakfast and get to school?

