**Multi Touch Activity – Microscopes Table – Teacher’s notes**

This activity is designed to be used in the week(s) following your visit. It has been devised to generate recall of the trip whilst also promoting higher order thinking. To this end it can take a few minutes to deliver at the start or end of the school day but could easily be expanded to be used as an extended task or project. Please do provide feedback to tell us how you used it and its level of impact. You can email us at socschools@scienceoxford.com.

**Summary:**

**Slide 1** introduces the activity, which involves looking at some everyday familiar objects in different levels of detail. Each object starts off with a highly magnified view and then zooms out three times. Encourage your class to discuss with their partners and see if they can come up with an answer at each point – try to treat each with equal merit until such point as you wish to reveal the answer. You might want to ask them to think about what material the object might be made from or whether it is/was alive or dead?

There are five initial objects (**Slides 2-6**) to consider. You might wish to extend this activity by using a tablet or phone camera to take close up images of items in the classroom. You can also purchase relatively low-cost clip on lenses to allow even higher levels of magnification for this purpose. Perhaps you have a USB microscope that would allow a similar exercise? Challenge the children to come up with their own series of images, of a single object at different levels of magnification.

**Slide 7** encourages further higher order thinking and discussion around the different ways in which we can enhance our view of objects. Some suggestions of extension questions are provided in the slide notes, and are listed below too:

Telescopes and microscopes both magnify objects but why would you use one rather than the other?

* What is the advantage of binoculars over a telescope?
* Why don’t we always use binoculars to see things in better detail?
* Why do we have two eyes?
* Which is the odd one out, and why?

**Slides 8-9** repeats the earlier exercise with a natural object that exhibits fractal or Fibonacci ordering. These slides might be a suitable extension for older year groups.