Scientist Activity Badge

Name.....Date started.....

To gain this badge, Cub Scouts must complete six activities, three from Part A and three from Part B.

For each, explain or show to a leader what has been done and the conclusions you have come to.

Part A - The physical world

1. Make a simple switch. Show how it could be used to control a light bulb powered by a battery.

   Signed..... Date.....

2. Show how electrical currents produce magnetic, chemical and heating effects, and explain what happens.

   Signed..... Date.....

3. Show that hot air rises.

   Signed..... Date.....

4. Make an artificial rainbow by splitting up a beam of white light.

   Signed..... Date.....

5. Make a pin-hole camera and understand the principles of operation.

   Signed..... Date.....

6. Keep simple weather records over a month, e.g. rainfall, temperature, cloud cover, wind direction.

   Signed..... Date.....

7. Make a simple compass and show the effects of metallic and magnetic materials upon it.

   Signed..... Date.....

8. Make a simple periscope.

   Signed..... Date.....

9. Show how to recover dissolved substances from a water solution.

   Signed..... Date.....

10. Recognise three different constellations.

    Signed..... Date.....

11. Make a model to show how the earth orbits the sun.

    Signed..... Date.....

Part B - The living world

1. Make some yoghurt and find out how living organisms are involved in the process.

   Signed..... Date.....

2. Grow cress (or a similar plant) and investigate what happens when light and water are excluded from it.

   Signed..... Date.....

3. Use a net and jar to find out how many different creatures live in the water and mud at the edge of a pond.

   Signed..... Date.....

4. Set up a wormery or ant colony and record the activity over a few weeks.

   Signed..... Date.....

5. Grow a bean or pea. When the root and shoot are visible investigate what happens when the seed is turned upside down and left to continue growing.

   Signed..... Date.....

6. Collect seeds from various plants and discover how these are protected and dispersed.

   Signed..... Date.....

7. Grow crystals or make crystal shapes from paper

   Signed..... Date.....

8. Investigate what happens to your pulse rate before, during and after exercise.

   Signed..... Date.....