



## CUBS INTEREST BADGE: SCIENTIST



(You must have passed your 9th or 10th birthday before starting this badge)

**Complete Part A and complete 3 of the 4 sections of Part B**

PART A:

	Date Completed:
Visit a museum, laboratory, observatory, zoo or other facility that employs scientists.	
Talk to a scientist about his/her work and report back to the Pack what you have learnt.	

PART B:  
ELECTRICITY

	Date Completed:
Make a simple switch together with an adult and show how it could be used to control a light bulb powered by a battery. Explain the safety precautions.	
Explain the difference between a conductor of electricity and an insulator.	
Explain the difference between a closed circuit and an open circuit.	

WEATHER

	Date Completed:
<p>Set up a simple weather station by using 3 of the following items and keep simple daily records over a period of a month. Show what you have made and explain how they work to your Pack.</p> <ul style="list-style-type: none"> <li>- Barometer to measure air pressure.</li> <li>- Anemometer to measure wind speed.</li> <li>- Wind sock to show wind direction.</li> <li>- Hygrometer to measure humidity.</li> <li>- Rain gauge to measure rainfall</li> </ul>	

## CHEMISTRY

	Date Completed:
Present a scientific experiment in front of your Pack. Explain what you are doing and why. Explain your results.	
Grow crystals from a salt or sugar solution.	
Materials are grouped together into acids or bases according to their pH. Make your own pH indicator from natural materials and explain why different household items change the colour of the indicator.	

## PHYSICS

	Date Completed:
Explain about the earth's magnetic field and make a simple compass.	
Show that you understand the difference between a solid, liquid and gas. Do an experiment to illustrate that you know the difference. Explain what you did to your Pack or Pack Scouter.	
Show what is meant by an optical illusion. Do some research on caring for your eyes and tell your Pack about it.	

Parent/Guardian Signature: \_\_\_\_\_

Akela/Cub Leader: \_\_\_\_\_