

## **Rock-it Science Observations For Winter Lessons 2010**

### **Slinkies (younger groups)**

Students heard about patents and then they were challenged to invent a way to make a slinky first walk down stairs and then down a ramp.

They may have noticed:

- The big slinkies go down steps easier if the top is lifted and thrown down over the edge
- If the steps are too narrow, the slinkies tumble off
- If the stairs are too wide, the slinkies can't make the next step
- If the stair steps aren't tall enough the slinky stops
- Slinkies are not good at curved stairs
- The little slinkies cannot walk down stairs designed for big slinkies
- Little slinkies move faster than the big ones
- It is easier to make slinkies walk down a ramp
- If the ramp isn't tilted enough the slinky stops
- If the ramp is tilted too much the slinky slides and tumbles down
- Sometimes the slinky will take side-by-side steps like a human
- Slinkies can walk on a treadmill but tend to go off the edges
- Little slinkies walk faster than the big ones on a treadmill
- Bumps in the treadmill surface mess up the way the slinkies walk