Algorithms Challenge

Algorithms - what are they?

Algorithms are sets of instructions used to complete a task – the instructions must be very clear and precise, so that a computer can understand. Computers love clear algorithms!

First Challenge – Crazy Characters (Age 7+)

Step 1 Draw your own crazy character on a piece of scrap paper – the weirder the better! Don't let anyone see it yet!

Step 2 Create an algorithm for your character, then give your algorithm to someone else so they can try to draw it! How well did your algorithm work? Did the crazy characters look the same? If not, why not?

What You'll Need

Pens/pencils
This handout, or
plain paper

Why are we doing this?

This lets you practice using algorithms for a simple task and shows how easy they are to use! If the characters do not match, try making the instructions more specific – computers can't make assumptions, so they need clear instruction!

Algorithms Challenge - Workspace

My Algorithm

1._____

2._____

3._____

4._____

5._____

6._____

7._____

More Algorithm Fun!

Ask a grown up at home to create algorithms for the following tasks around the home. Try them out see if they work!

- ✓ Brushing your teeth
- ✓ Tidying your bedroom
- ✓ Making the bed

Don't' forget computers will only follow the programmed algorithm!

My Algorithm (Ages 4-7)

Use this template to fill in your algorithm if you're finding it difficult to think of steps!

1. Draw a _____ sized, _____ shaped body.

2. Draw _____ arms, sticking out of it's _____.

3. Draw _____ legs, sticking out of it's _____.

4. Draw ____ eye(s), ____ mouth, ____ nose.

5. Add in ____ toes on the ____ and ____ fingers on the ____.

6. The hair should look like _____.

7. Extra features: