**Computing planning for 2 weeks:**

If your child has access to a laptop or desktop computer, this is a good opportunity for them to develop their typing skills. The ability to use two hands to type (as well as using a computer mouse) is still an important skill in ICT, despite the prevalence of touch screens. The BBC has a great program called dance mat typing which is great fun and develops keyboard skills. Start with level 1!

<https://www.bbc.co.uk/bitesize/topics/zf2f9j6/articles/z3c6tfr>

Your child has access to all the resources on school360 – they are familiar with the JIT resources which are great for all sorts of computing work, but if they want to put their typing skills into practice, they could choose ‘mix’ and publish their own poem based on the Owl and the Pussycat that they have been doing this week in literacy.

**When we return to school we will be doing a unit on programming so it would be very useful if your child could complete the following activities over the next 2 weeks:**

**Computing, lesson 1**

Learning objectives

To describe a series of instructions as a sequence

* I can follow instructions given by someone else
* I can choose a series of words that can be enacted as a sequence
* I can give clear and unambiguous instructions

Key vocabulary

Instruction, sequence, clear, program, algorithm(a set of instructions)

**Lesson**

Ask your child how we get computers to do what we want. Discuss ideas.

Guide your child to the idea that we give computers instructions, and instructions may be given by clicking, tapping, or key presses. Pupils may also suggest that we program computers.

**Following instructions**

Tell your child that you are going to give them instructions to draw something on their boards or paper. Tell them that they should only draw what they are told, but do not tell them what the object is that they are drawing. Select one drawing from the examples sheet, eg a house. Slowly describe to pupils what they should draw on their boards, one part at a time, for example:

Draw a medium-sized square in the middle of your board

On the top edge of the square, draw a triangle that is as wide as the square and about half as tall, etc

When you have finished describing the object, ask your child to show you their drawings. Highlight that the instructions needed to be clear, and that your child had to listen and follow carefully. Explain that a set of instructions is called a **sequence** of instructions

Give them another set of instructions to draw something else. Repeat the activity as time allows, choosing different drawings from the sheet or using your own ideas.

Then ask them to give you instructions to draw an object – they could use one of the pictures, or devise their on (this works best if they draw a simple object first, so they can see it as they describe it to you)

**Computing lesson 2**

Recap what they learned from the last lesson:

How do we get computers to do what we want?

When we are giving instructions, how can we make sure they are followed accurately? (make sure they are clear and in the correct order)

**Objectives**

To describe a series of instructions as a sequence

* I can follow instructions given by someone else
* I can choose a series of words that can be enacted as a sequence
* I can give clear and unambiguous instructions

**Main lesson**

**Robots**

Tell your child that today they are going to play robots.

They will be giving instructions to a you who will pretend to be a robot. Explain that these instructions need to move the robot (you) around the room, and the robot cannot speak; they can only follow instructions.

Ask your child to spend a few minutes talking about words or phrases that could be used to give directions. These directions must be clear, precise, and doable. For example, the instruction “go forwards” isn’t clear as it doesn’t indicate how far. The robot may start moving forwards and continue until they hit a wall.

Record suitable instructions in a list so that your child can see them. Some examples of suitable instructions are: move one step forwards, move one step backwards, turn a quarter turn, turn to face something, stop, etc.

This is a good opportunity to help your child recognise right and left turns too.

**Giving instructions**

**Note:** In this activity, your child should issue and follow one instruction at a time.

Tell your child that they will be working with a partner( you or other adult or a sibling): one person will pretend to be a robot, and the other person will be the programmer giving the robot instructions. Ask your child to try out the instructions from the list, using them to move their partner around the room.

Remind your child that the instructions have to be clear and precise. Also, highlight that the robot cannot speak and can only do as instructed (unless it’s dangerous!).

After 5 minutes, swap roles. After a further 5 minutes, stop. Ask your child for feedback:

* Did any of the instructions not work very well?
* How could the instructions be improved?
* Were there any new instructions?

**Giving a set of instructions**

Tell your child that in this activity, they will be giving their robots some more instructions, but this time, they will give two or three instructions at a time. Explain that the programmer will need to say “Go” to tell the robot to run (follow) the set of instructions, so that the robot knows that the programmer has finished giving their instructions. Tell your child that the programmer will need to carefully watch their robot to make sure that the robot does as they intended.

After 5 minutes, swap roles.

**Robots follow instructions**

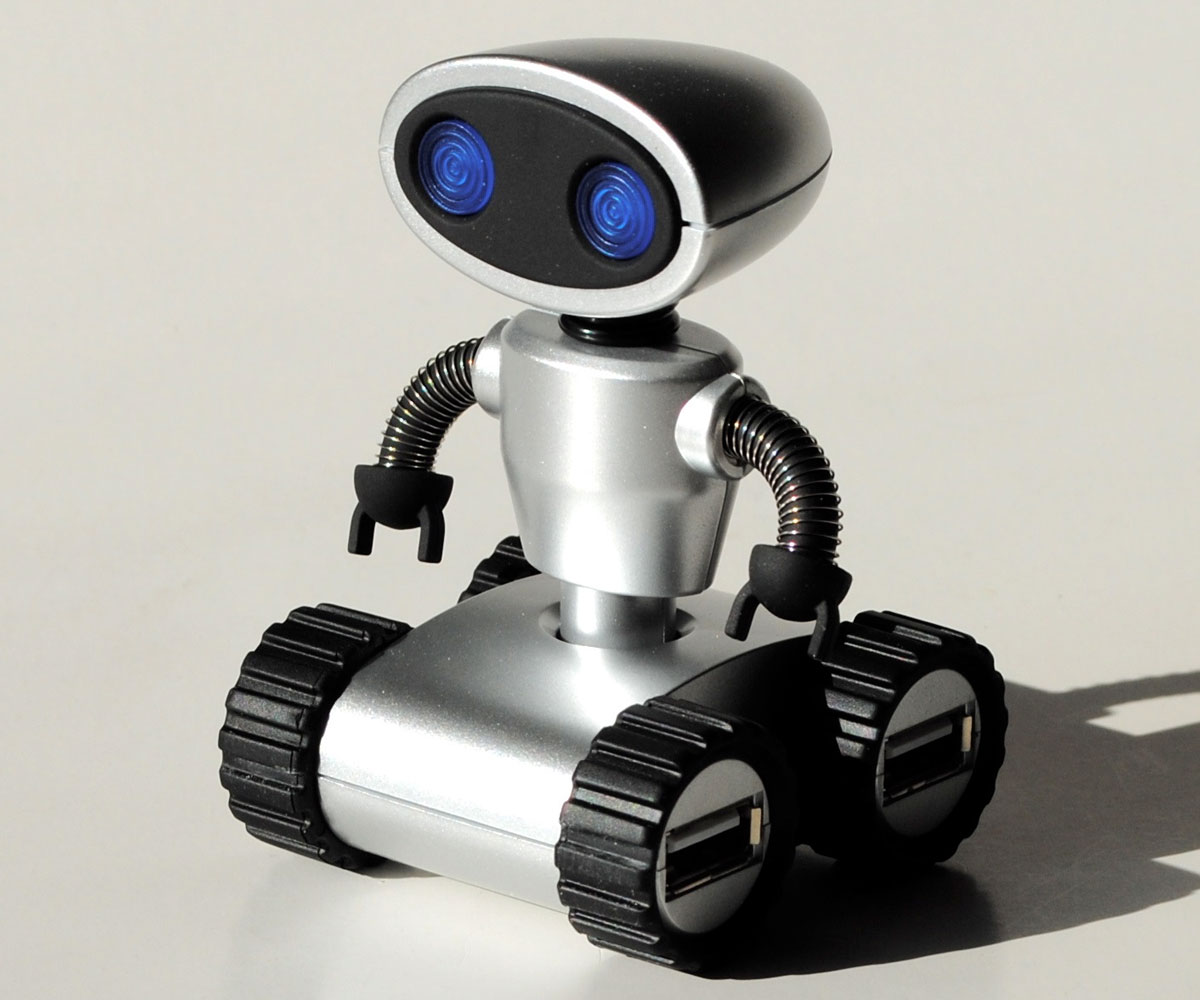
Show the picture of a robot. Explain that robots have a computer inside. Robots do what we want because they follow instructions. They don’t make any choices themselves.

Talk about the robot and ask your child to reflect on their experience of being a robot and giving a robot instructions. Ask your child how they would give the floor robot instructions. Describe how giving the floor robot instructions is different to giving a partner instructions.

Tell your child that the sets of instructions that they gave their partners can be called an **algorithm.**



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