

# **Objective: I Can Input Algorithms**

### I can write instructions

In the top right hand corner you will see Pabina and Puja, 14 year old school children from Lahan in Nepal. They have to collect water from school.

Think about the instructions you would provide to move Pabina and Puja to the water pump in the bottom left hand corner, avoiding the obstacles on the way.

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In partnership with WaterAid	WaterAid Winter A <sub>l</sub>	ppeal 2021. Resource	e created in collabora	tion between Welsh W	/ater, Anglian Water &	a WaterAid

Write your instructions in the	e space below.







## I can programme a route

17 year old Sandhya in Nepal has to walk to a water pump to get water. She can be seen in the top right hand corner of the map.

#### Task

Write your instructions using the following format as an example:

Forward 1, Left turn 90, Forward 2, Right Turn 90, etc.

Remember to include how many squares to move

Write instructions for a route through the grid from the start square to the pump using a forward, left or right turn. Make sure to avoid the obstacles!

Don't forget to specify the degrees if the direction changes!

Find as many routes as you can in the time given by your teacher.

### **Secondary Task**

Then swap with a partner and 'debug' their routes by testing them out and marking any errors.







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## I can input algorithms

For this activity, you will need access to an electronic device such as a laptop or computer.

Can you record simple algorithms on a platform such as <u>JIT</u> (easy) or J2Code Visual (challenging) to match your route in the previous activities.

Ι.	when you press play?
2.	Did your algorithm work first time?
	••••••
3.	What changes were required to debug your algorithm and get
	it working?





