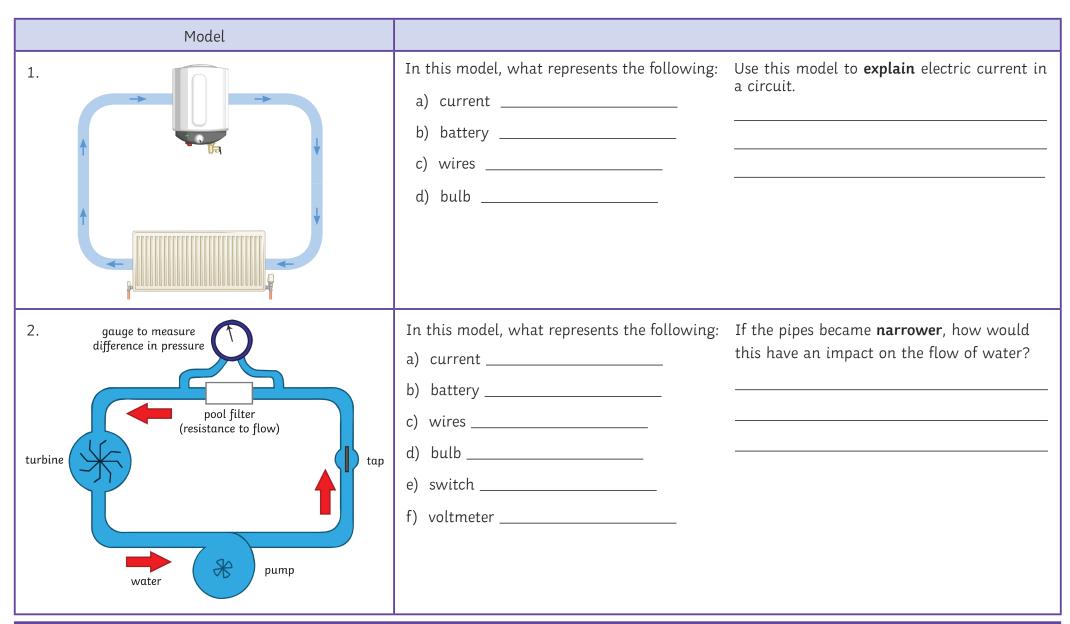
## **Model Evaluation Activity**





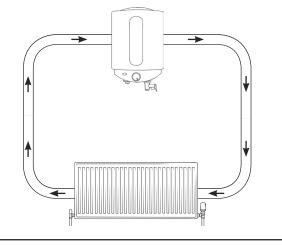
| 3. In the space provided, create your own model. | In this model, what represents the following:                      |
|--|--|
|  | a) current   |
|  | b) battery   |
|  | c) wires   |
|  | d) bulb  |
|  | Describe the strengths (good points) of the model.                 |
|  |  |
|  |  |
|  |  |
|  | Describe the weaknesses (bad points) of the model.                 |
|  |  |
|  |  |
|  |  |
|  | Use your model to explain how electricity flows through a circuit. |
|  |  |
|  |  |
|  |  |
|  |  |



## Model Evaluation Activity Answers

## Model

1.

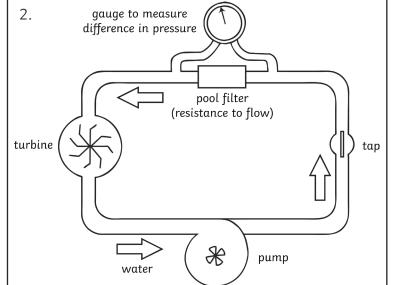


In this model, what represents the following:

- a) current flow of water
- battery pump and boiler
- wires **pipes**
- bulb radiator

Use this model to **explain** electric current in a circuit.

Current is the flow of charge around a circuit. The faster the charge flows, the higher the current. The current is the same everywhere in a series circuit. Current is not used up.



In this model, what represents the following:

- a) current flow of water
- b) battery pump
- c) wires pipes
- d) bulb turbine
- e) switch tap
- f) voltmeter pressure gauge

If the pipes became **narrower**, how would this have an impact on the flow of water?

It would be increasingly difficult for the water to travel around the system. A narrow pipe means increased resistance; increased resistance leads to a smaller current.