



LQ: Can I understand what an algorithm is?

Steps to success



All: I can explain that an algorithm is a set of instructions.

I can understand that these instructions sometimes need to be carried out in order.

I can understand there can be more than one way to solve a problem.

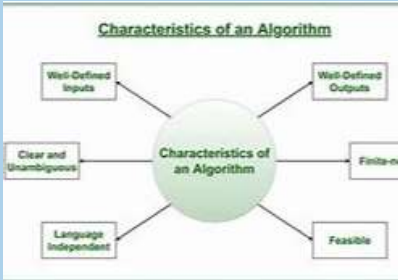
LQ: Can I understand what an algorithm is?



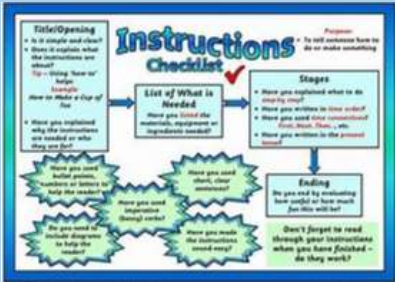
STAR WORDS



Algorithm



Instructions



Computers



Order



Specific



Tasks



Solution



LQ: Can I understand what an algorithm is?

TP:

Who put their trousers on before their top this morning?

Does it matter which you do first? Why?

Does a shirt and tie need to be put on in a specific order?

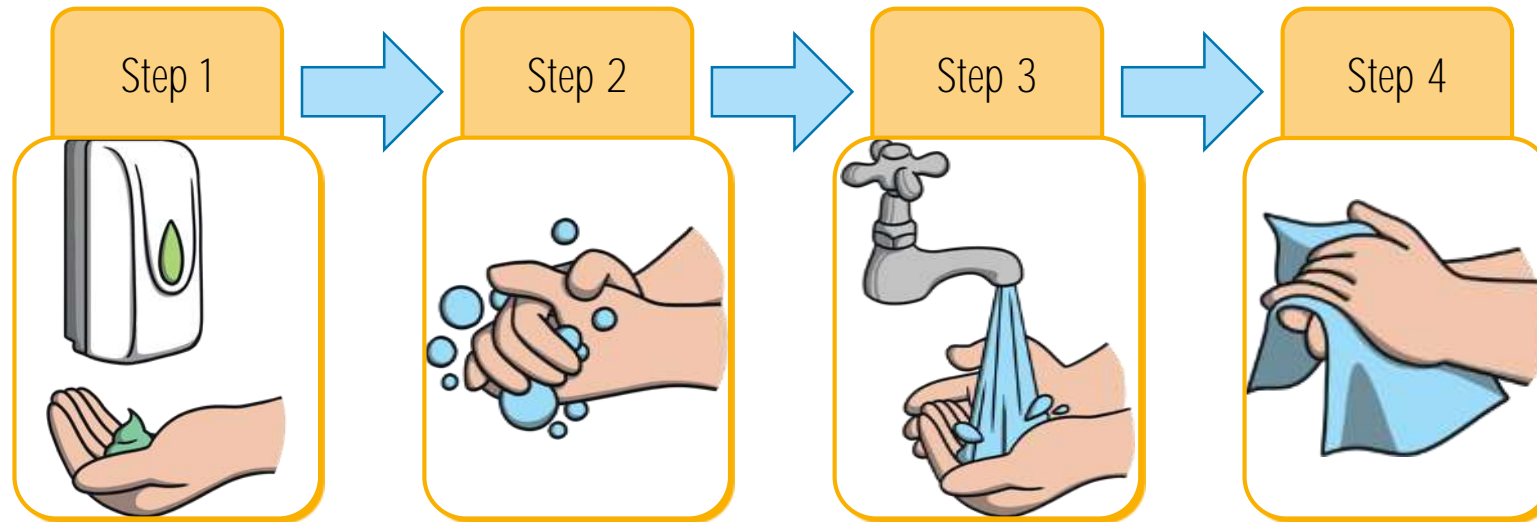
Do you think your partner got dressed in the same order as you this morning?

What Is an Algorithm?

An algorithm is a list of step-by-step instructions in order to get a task done. Computers can follow algorithms, just like people.

It is important that each step in an algorithm is completed to achieve the correct outcome.

What do you think the outcome of this algorithm is?



<https://www.bbc.co.uk/bitesize/topics/zsj3sk7/articles/z3whpv4>

Watch: What is an algorithm?

What is an
Algorithm?



01:12

Self Assessment

Do you understand the features of a keyboard?



Examples of Algorithms

We use lots of different algorithms in our everyday lives. These are all examples of algorithms you might have followed.

Following a recipe to make cookies.



Following directions to get to the park.



Getting dressed.



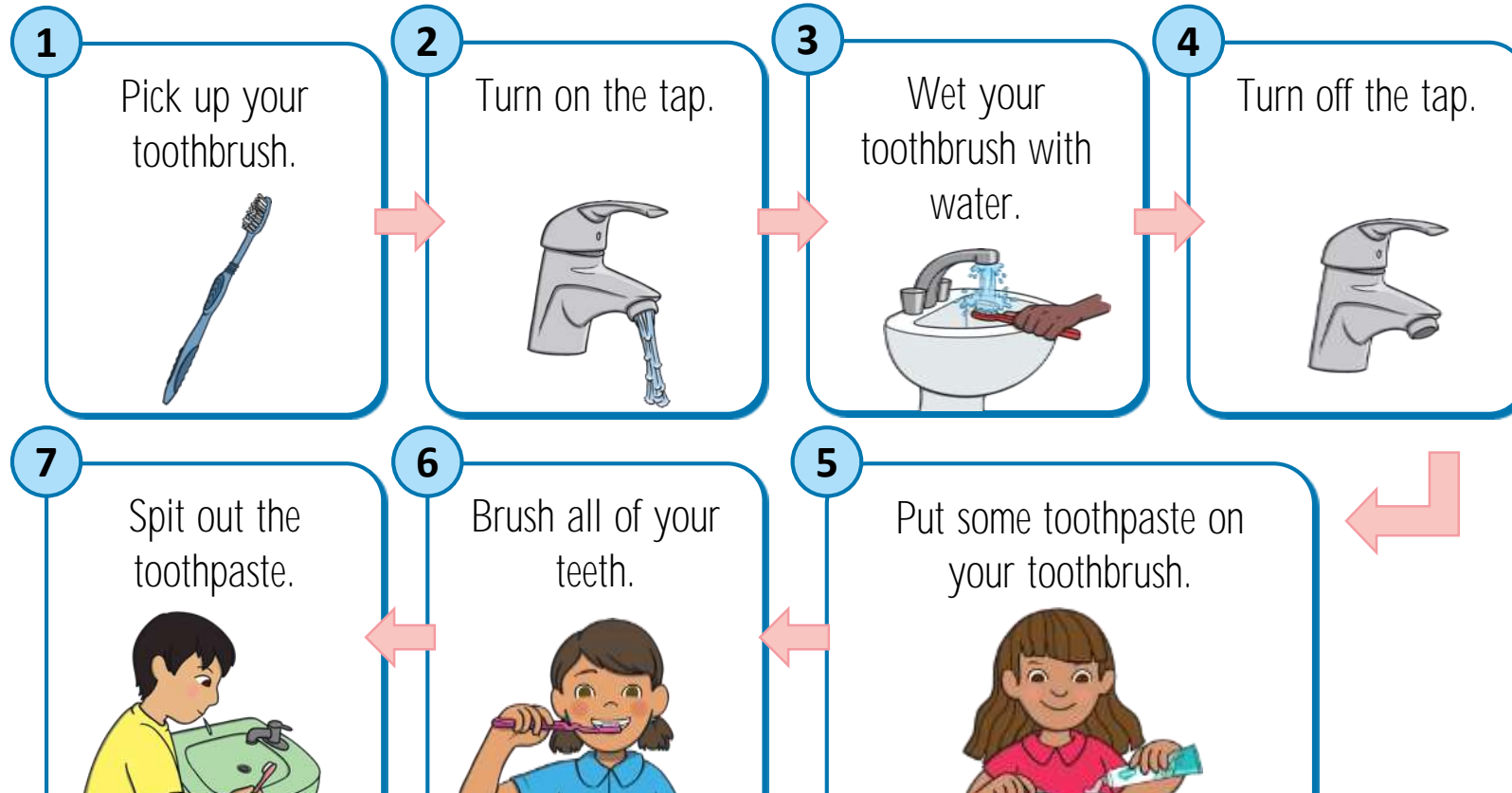
Getting ready for bed.



Can you think of any other algorithms that we might use everyday?

Brushing Your Teeth

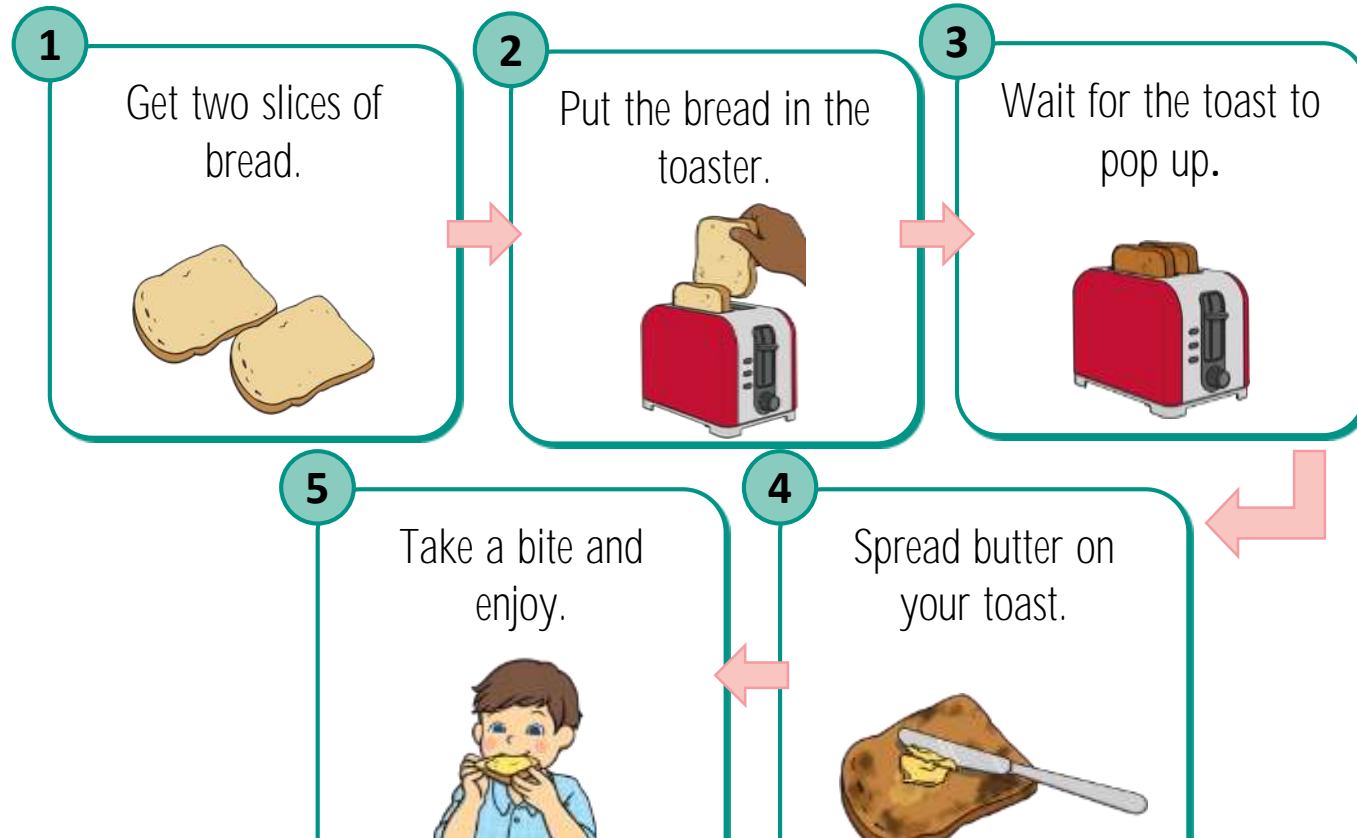
Brushing your teeth is an example of an algorithm you follow everyday.



What might happen if you did not follow these steps in the correct order?

Making Toast

Making toast is another example of an algorithm.



What might happen if you did not follow these steps in the correct order?

Quick Quiz

What is an algorithm?

Click on the correct definition below.

a

A shopping list

Try again.

b

A list of step-by-step instructions that a computer follows in order to get a task done.

Well done! That is correct.

c

A computer game design.

Try again.

Quick Quiz

Which of these is **not** an example of an algorithm?

Click on option you think is **not** an algorithm?

a

A recipe to make a smoothie.

Try again.

b

Instructions to build a paper plane.

Try again.

c

Directions to go to the shop.

Try again.

d

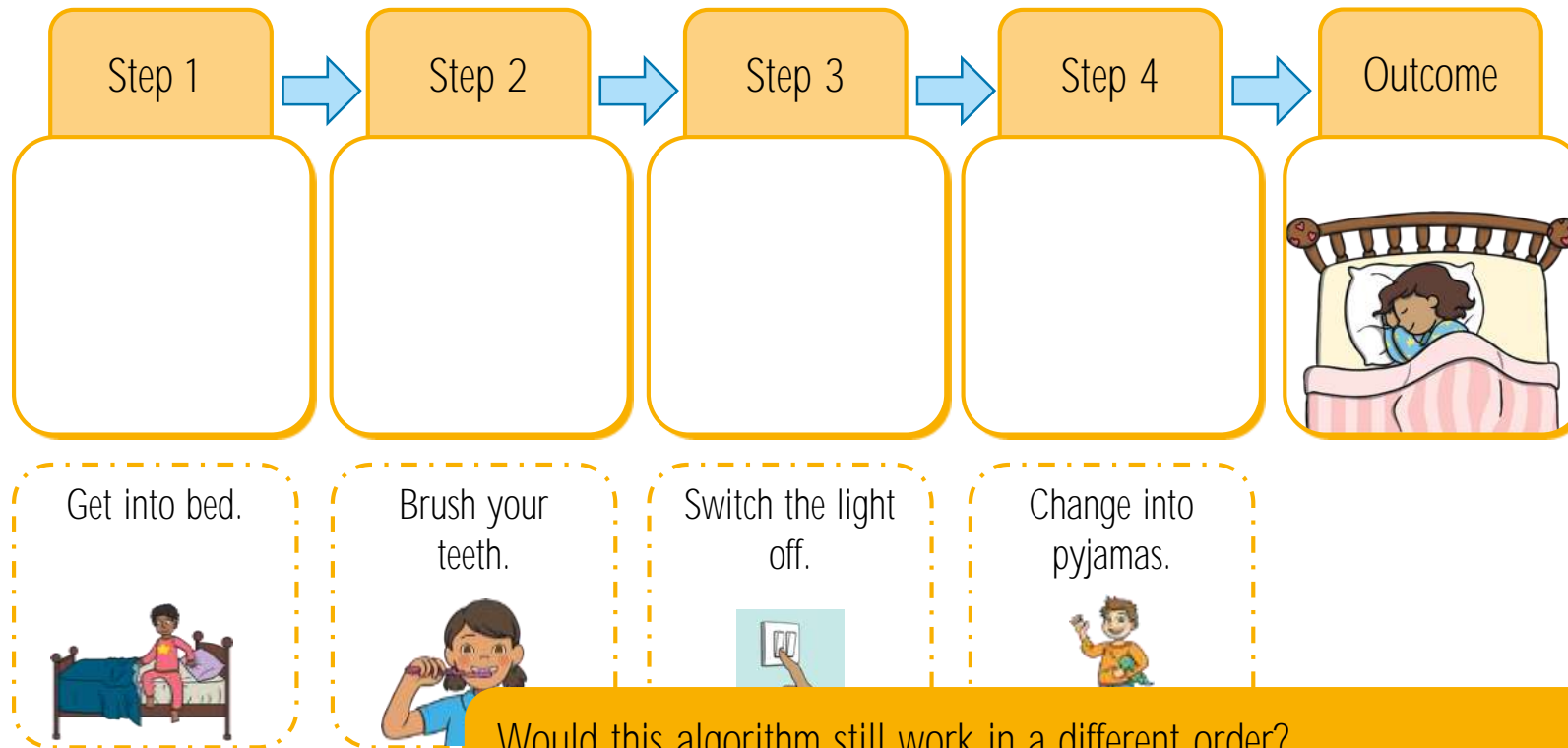
A Christmas present list.

Well done! That is correct.

A Christmas present list is **not** an algorithm as it is not a list of step-by-step instructions and can be completed in any order.

Quick Quiz

Decide which order this algorithm will follow. Click on each step to reveal the answer.



Would this algorithm still work in a different order?

LQ: Can I understand what an algorithm is?

TASK

Create an algorithm for how to make toast.

Remember it has to be in order!

Self Assessment

Do you understand the features of a keyboard?

