

CLIMATE CHANGE | GLOBAL

CONTEXT

In 2015, leaders from the 193 countries of the United Nations met to discuss the world's problems and agreed on a plan to tackle them by the year 2030.



1.1°C

How much hotter the Earth is compared to the 1800s



90%

Climate change is caused by humans



CO2

Greenhouse gas that causes global temperatures to rise

THE ISSUE

Climate change is having a large impact on our civilisation. The effects are already visible and will continue to worsen. Through education, innovation and adherence to our climate commitments, we can make the necessary changes to protect the planet.

FOCUS SUSTAINABLE DEVELOPMENT GOALS

Climate Action



Consumption and Production



Good Health and Wellbeing



Life on Land

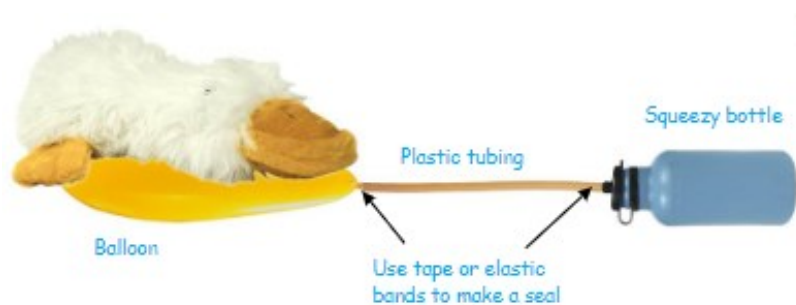




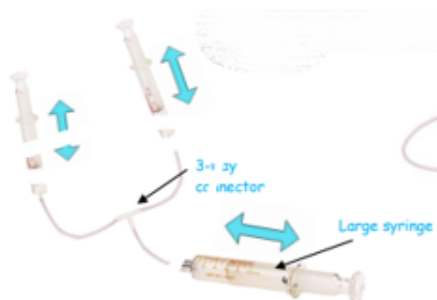
THE DESIGN CHALLENGE

Can you make create a sustainable toy that uses a pneumatic system?

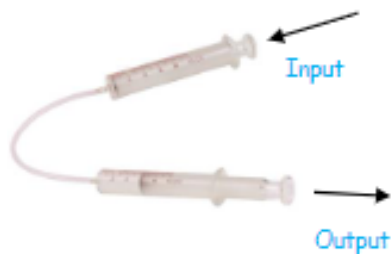
Pneumatic system



T-connector



Input and output



Glossary

pneumatic	Containing or operated by air or gas under pressure.
input movement	Movement that is put in, taken in or operated on by any process or system.
output movement	The amount of something that is produced by machinery, a person or industry
pressure	Continuous force applied to an object by something in contact with it.
inflate	Fill something with air or gas so that it is filled
deflate	Let air or gas out of something.
compression	The action of reducing volume.



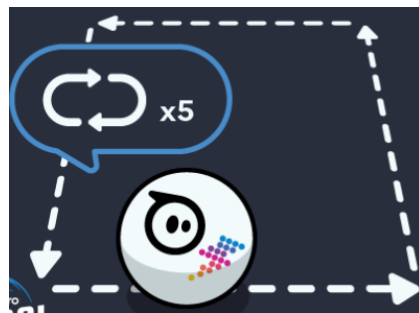
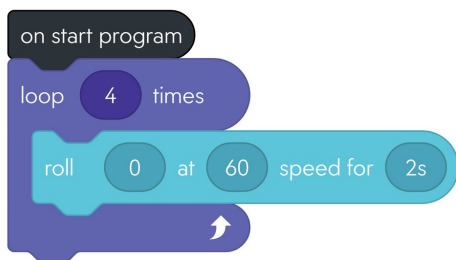
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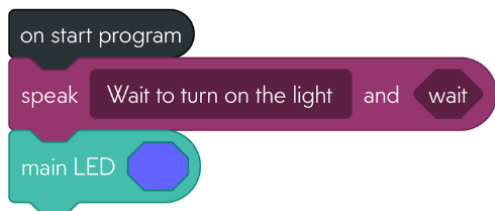
Computing

Can you use technology to aid with storytelling?

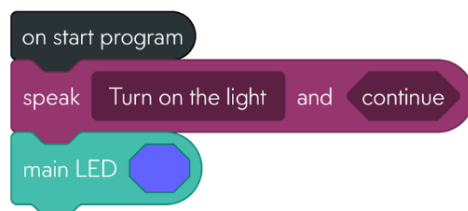
Looping Sphero BOLT



Synchronous - one action at a time



Asynchronous - multiple actions at a time



Glossary

algorithm	A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
debugging	The process of identifying and removing errors from computer hardware or software.
input	Signals or data that is received by a computer to give it an action
output	How a computer presents what has been in-
coding	The process of writing a computer program
looping	A series of instructions that are continually repeated.
device	Something made of adapted for a particular



Sphero BOLT
How do you loop?



BBC Bitesize
What is debugging?



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