



What's going on this week?

Artificial intelligence and the use of robots are developing very quickly. More and more jobs worldwide, particularly in India and China are being replaced by robots and Google's DeepMind have announced this week that they have made another big advance by enabling a robot to master the Chinese game of 'Go' independent from humans. Many of us are not used to the idea of machines making decisions for themselves, but the day when they will do this by themselves is likely to arrive sooner than we might think.

Main question:

Should we teach robots how to think?

Listen, think, share

- Look at the poster and talk about our experience of robots. Have we seen them, have we used them and in what capacity, have we played with them as toys or have they helped us in our everyday lives? Talk about how some modern devices we might use are essentially taking on the robot role, but they may not always look how we'd expect a robot to look.
- Ask the children to give descriptions for what a robot is and what kinds of things they should do/their roles. Talk about how they are manmade and so ultimately, they are designed to make our lives easier and to do jobs
- Tell the children some of the areas where robots are used for many jobs already, things like car production, mining and even for some surgeries by doctors.
- Talk through a typical day with robots from the assembly resource. Which parts do you think could be improved by having robots? Which are better left without their input? Talk about why. Are there certain situations we can think that robots wouldn't help or make things better? E.g. if we are sad or if we wanted someone to play with us.
- Ask the children if they think what a robot looks like is important? Looking at the 2 different robots from the assembly resource, ask which they would like as a robot to help in their house and talk about why. Should what a robot looks like matter?

Reflection

As technology changes our lives, we must remember that robots, however human looking they might appear and however they might be able to help us, there will always be some things we will need each other for.



KS1 Focus

Question:

How can robots help us?

Listen, think, share

- Ask the children if they have seen robots or played with robot toys. Talk about how a robot might be different from a normal computer that we use.
- Ask children why they think robots might have been created. Explain that the first ever robots helped build cars working with very hot objects. Why might it be better that a robot does things like this than a person?
- Ask the children if they think a robot would be good to have at home or at school. What kinds of things might we want the robot to do? What kinds of things do we think they wouldn't be able to do and why?
- Do we think some things might be easier if we had robots as part of our everyday lives, what and how?
- Look at the pictures from the KS1 resource. How might a robot be able to help in each situation? Would a robot make each situation better or worse for the people there? Talk through the reasons why.

Reflection

There are many ways robots will be able to help us in the future but there are some things that cannot be replaced by people.



KS2 Focus

Question:

Will the world be a better place with more robots?

Listen, think, share

- Ask the children if they think they would like to have a robot in their home. Talk about why and how the robot might make some things easier e.g. walking the dog, preparing breakfast, ironing clothes.
- Ask the children to really imagine what a world would be like with robots as part of our everyday routine. Robots at home, at school, in shops etc.
- Look at the different personality traits from the KS2 resource. Talk about what they all mean and which we think you would be able to teach a robot and which we feel that are only able to be traits for humans. Talk about why.
- Discuss which jobs we think might be affected in the future by robots being able to learn certain skills. Do we think ultimately, all jobs may be able to be undertaken by robots? Why, why not?

Reflection

Robots have often thought to be a thing of the future but as technology is developing so quickly, It's likely they may play a part in our lives sooner than we think! It's important when we make decisions, we think not only about what will make our lives easier but also what's the best thing to do for all.



Picture News

KS2 Cross-Curricular Ideas

English: Plan and write a Robot Narrative. Use clips from Wall-E or The Iron Giant or read Ted Hughes 'The Iron Man' to help inspire the story. Ask the children to consider whether their robot will be good or bad!

Maths: Angles! Explain that, when programming robots, the children need to have an understanding of angles. Ask the children to create an angle fact box including information such as half a turn/straight line = 180 degrees. In pairs, one child be a robot and the other create an 'algorithm' to make them move.

Computing: Explain that robots work because they are programmed with a clear set of instructions or an algorithm. If you can, allow the children opportunity to program robots (a car, floor turtle etc). Children could also look at one another's algorithm and detect/correct any errors. If you are unable to program robots in school, then use the opportunity to create algorithms in other programs such as Scratch.

Art: Ask the children to create a picture of the robot from their story.

History: Ask the children to research the history of robots. Share and discuss findings including placing dates chronologically on the board. Are there any surprises? Although not actually given the term robot, the concept has been around a lot longer than we imagine!

MFL: Imagine their robot speaks the MFL taught in school. How would you greet it? What might you ask?



Picture News

KS1 Cross-Curricular Ideas

English: Show the children a picture or watch a clip of a Robot film such as Wall-E (or even use their own robot designed in the DT section!). Ask them to describe the robot to their talk partner. What does he look like? How does he move? What does he sound like? Ask the children to write a description of the robot. This could be done as a Fact File or Wanted Poster depending on ability.

Maths: Robot Monsters using an activity from NRICH (see useful websites).

Computing: Explain that robots are like toys that you can program. Ask the children if they think they have any toys at home that might be like this. If possible show children how to program Roamer, Bee-Bot or a floor turtle. Allow opportunity for the children to explore programming.

DT: Design and make a junk model robot. Ask the children to bring in cereal boxes and card from home to add to their model.

Dance: Use the movements a robot makes to inspire dance. Teach a whole class section then ask the children to work in groups to choreograph their own piece. Share with peers.

Role-play: Create a 'Futuristic Corner'. Children could add ideas about what they think things might be like in the future. Will robots take over jobs human's do now?



Picture News

This Week's Useful Websites

This week's news story

<http://bbc.in/2zuGG4h>

Jobs that may be affected by robots
[http://www.bbc.co.uk/news/technolog
y-33327659](http://www.bbc.co.uk/news/technology-33327659)

This Week's Useful Videos

Robocup 2017, football clip

<http://bit.ly/2yN8DXA>

Maths resource

<https://nrich.maths.org/2404>