

Growth Mindset Lesson 1: You Can Grow Your Intelligence

Lesson plan

Lesson overview

This lesson shows students that it is possible for them to grow their brains. Firstly, they are introduced to the way that the brain can make new connections when we learn new things and that practising these things strengthens the connections and makes them get easier. Next, they work in groups to study the scientific evidence that shows that they can grow their intelligence. Finally, they are introduced to Jack Andraka as an example of an ordinary boy who achieved something extraordinary through sheer hard work.

Objectives

- Understand that intelligence is not fixed and that people can get smarter by working harder.
- Review the evidence that shows that the brain continues to develop and make new pathways.
- Learn about Jack Andraka and see how an ordinary teenager can achieve something truly amazing if they have enough motivation and are prepared to work as hard as it takes.

Materials needed

- Lesson 1 PowerPoint
- Copies of Evidence Sheets 1-4
- Lined Paper

Procedure

1. Use slides 1-6 (Lesson 1 PowerPoint) to introduce the idea that intelligence isn't fixed and that our brains can continue to make new connections, learn new things and get better at things.
2. Show the Robert Winston YouTube clip (link on slide 7) which shows how the brain makes new connections and how things get easier the more we practise them.
3. Display slide 8 and split the students into 4 groups. When they are in their groups students should number themselves from 1-6. Give each group copies of one of the evidence sheets. Explain to the students that each group needs to summarise the information on the evidence sheet and that every member of the group will need to be able to explain their evidence to another group. They will not be able to take their evidence sheets with them, only their notes so they need to write a summary together and then make sure that they all understand it and can explain it.
4. Students now form new groups of 4 (all the number 1s from each group make a group, the number 2s from each group make another group etc.) and take it in turns to explain their evidence to the other members of their new groups.
5. Show students the picture of Jack Andraka on slide 9 and tell them his story. Emphasise the point that Jack was very ordinary, had never stood out, wasn't top of his class, didn't have amazing exam results – he just really set his mind to achieving something and didn't stop working at it until he had succeeded.