

Single Lesson Plans

Lesson Objective:

- Show research skills in reading scientist profiles to construct questions which involve higher order thinking
- Recall new scientific content relevant to their current school topics
- Name at least two STEM related careers
- Engage in conversations with scientists in an appropriate manner
- Use the internet safely by demonstrating appropriate behaviour
- Use critical thinking to make an informed voting decision

Curriculum links:

- Apply principles and concepts to unfamiliar situations.
- Make informed judgements about science.
- Develop scientific literacy

Resources:

- Chat booking (important: book in advance from your Dashboard).
- Computers/ laptops or iPads.
- Login cards/ registration URL for individuals or pairs (you will find these from your Dashboard or your Chat booking confirmation)
- Profiles of the scientists attending your Chat
- Reflection activity (linked on Dashboard)

Starter (or Homework set last lesson): 10 minutes

1. Give students access to the activity through the premade login cards or the student registration URL.
2. Tell students which scientists will be attending your Chat
3. Students should explore the profiles of the scientists attending your Chat. Each student should write down 3 questions they would like to ask during the Chat.

Support

- Students work in pairs
- Come up with some questions as a group
- Scaffold questions or provide sentence starters

Extend

- Students look at the questions they have formed and see if they can make them open-ended questions
- Students look up some of the techniques or areas of research the scientists mention in their profiles

Chat: 30 minutes

1. Students access the Chat
2. Students ask their questions to the scientists, as individuals, pairs or small groups.

See the teacher guidance for how the Chat system works.

3. Students should stop for a moment to take a look at the response to their question. Students should consider:

1. Do they have a follow-up question?
2. Do they want more detail?
3. Do they need a clearer explanation?
4. Are they ready to move onto their next question?

Support:

- Ask the students if they fully understood the response they got. If not, encourage the students to ask for more detail

Extend:

- Students who have asked 3 or more questions should take a look at the responses.
- Can they ask a follow-up question?
- Students should take a look at their peers' questions. Do they have a follow-up question?

Ask: 5 minutes

- In the final few minutes of the Chat, alongside the mod's prompt, encourage students to think of a question that they'd like more information about.
- Students use the Ask feature to ask their questions; this is also a good chance to re-ask a question that didn't get answered in the Chat.

Support:

- Students could ask a question about a personal interest of theirs or the scientists

Extend:

- Students should think about a question that was answered by a scientist in the Chat.
- Can they ask a follow-up question to this to deepen their understanding?

Vote: 3 minutes

- Students should take a minute or two to consider which scientist is the most deserving of their vote. Share with a partner why this is the case.
- Students vote from the Vote page for their favourite scientist to win £500.

Reflect: 5 minutes

- Complete the class reflection activity to facilitate discussion around your students' experience. Through this assessment tool, students delve deeper into the learning outcomes they have met.