

Biochemistry Careers Lesson Plan

This lesson explains to students the variety of careers available in biochemistry. It explores courses, career pathways and skills that could be developed as students continue their studies in biochemistry beyond school. The lesson plan can be used for PSHE or science lessons, and accompanies the **Teachers' Biochemistry Careers Lesson Presentation**. Both plan and presentation are available for you to download and modify.

Learning outcomes

By the end of the lesson, students will:

- Have explored a variety of biochemistry careers
- Understand how to access careers information provided by the Royal Society of Biology and the Biochemical Society

Resources

- A3/A4 paper and coloured pens for making career profile cards
- Paper and pens for writing notes
- Photocopies of **Biochemist Bingo** answer card and question sheet

Printed copy or internet access to:

- Make a Difference posters
- Spotlight on the Life Sciences
- Becoming a Biologist
- Biochemistry: the career guide
- <u>Careers profiles</u>

Internet access to:

- Make a Difference website
- BioPathways
- Biochemistry: The Molecules of Life

Teaching activities STARTER

- 1. Working alone or in pairs, ask students to think of answers for the following questions:
 - What is a biochemist?
 - What biochemistry careers can you think of?
 - What might you study?
 - What skills might you develop?

Discuss students' answers as a class.

Example answers can be found in the **Teachers' Biochemistry Careers Lesson Presentation**. Help define any of the job titles, courses and skills in the presentation which students are not aware of.



MAIN ACTIVITIES

2. Ask students to explore the **Make a Difference** posters and website as well as the **Spotlight on the Life Sciences** booklet. Let students identify career paths biochemists might take, including workplaces, job titles and courses.

Working alone or in groups, ask students to produce their own career profile card or 30-second pitch for a biochemistry career using **Make a Difference** posters/website and **Spotlight** booklet. They may choose a career listed in the **Teachers' Biochemistry Careers Lesson Presentation** or one they thought of in the Starter activity.

Some ideas to research and include in either a career profile card or pitch:

- Job title/area
- What to study? (e.g. degree, diploma)
- Skills needed and developed
- Day-to-day activities (i.e. duties and responsibilities)
- o Workplaces
- How does their work make a difference?

Ask students to present their career profile card/pitches to the rest of the class.

4. Ask students to explore the **Becoming a Biologist** and **Biochemistry: the career guide** booklets, and find out about applying to study biochemistry beyond school.

Play **Biochemist Bingo** to test students' knowledge gained from reading the booklets about degrees, their alternatives and work experience. Ask students to cross off answers from the bingo card as you read out the questions.

After completing main teaching activities, summarise with students the further support that is available from the Royal Society of Biology and Biochemical Society. You may wish to use these resources for extension or homework activities.

- Careers profiles includes profiles of people working in different areas of biochemistry.
- BioPathways includes video interviews of people who have studied bioscience degrees.

PLENARY

5. Introduce students to online course, **Biochemistry: The Molecules of Life**. (Students may wish to complete the course in their own time.)

Ask students to watch the video from course featuring Dr Melissa Salmon. Discuss as a class answers to the following questions:

- What is Melissa's job?
- How did she become a biochemist?
- Why does she think biochemistry is important and useful?

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