

Where's The Head?

This document prepares teachers for the “Where's The Head?” activity offered by UCL Department of Science and Technology Studies (STS).

Summary: This activity focuses on the interpretation of one object that students are asked to observe and speculate over. Teachers are asked to **print** one image as a handout for use in group discussion. Students should be organised into groups prior to the start of the lesson. This activity is designed to support the Theory of Knowledge curriculum of the International Baccalaureate programme.

Aim:

1. offer a real-to-life example of Theory of Knowledge
2. relate epistemology to real episodes in history of science
3. encourage problem-solving and collaboration

Duration: 45 minutes

Class configuration: This is a groupwork exercise. The ideal size for each group is 3-4 students. They should be sitting together and able to talk amongst themselves while jointly viewing the “specimen” image. During the lesson, students should be encouraged to work as a team to (1) view the “specimen” from multiple angles, (2) develop hypotheses about the object's identity (what is it?), (3) draw possible shapes of the living organism based on their hypotheses, (4) test their ideas, and (5) share their ideas with others in the classroom and with the tutors online.

Essential materials for each group:

1. blank paper for drawing and note-taking for each student
2. writing instruments, such as pencils
3. **one printed copy of the “specimen” document for each group**, or one printed copy for each student, as the teacher thinks appropriate. The printable version of the “specimen” document is available:
<https://www.ucl.ac.uk/sts/tok>

During the LIVE session the UCL tutor will project the “specimen” image in the classroom for reference in the discussions. They also will use the “share screen” function to show additional images of the specimen, which will give alternative perspectives on the object.

Preparation for pupils: none.

Structure of the session (45 minutes total):

1. welcome by teacher (2 minutes)
2. introduction and instruction by UCL tutor (5 minutes)
3. observation and hypothesis building by students working in groups (10 minutes)
4. group sharing (5 minutes)
5. talk by UCL tutor (5 minutes)
6. questions and discussion (5 minutes)
7. closing by UCL tutor (1 minute)
8. closing by teacher (2 minutes)
9. end session

About us

The tutor is Professor Joe Cain <J.Cain@ucl.ac.uk>. He is UCL Professor of History and Philosophy of Science. Professor Cain is an expert in the history of Darwin and Darwinism and the history of eugenics. He is host of the podcast, "WeAreSTS," which explores STS as an interdisciplinary subject. For more about him:

<https://ucl.ac.uk/sts/cain>

The sponsor is UCL Department of Science and Technology Studies (STS). The programme offers several undergraduate degrees:

1. History and Philosophy of Science BSc
2. History and Philosophy of Science with Study Abroad BSc
3. Sociology and Politics of Science BSc
4. Sociology and Politics of Science with Study Abroad BSc

For more about our programmes:

<https://ucl.ac.uk/sts/bsc>

Teachers interested in an online visit from STS tutors, especially supporting the Theory of Knowledge curriculum, should contact our Admissions team:

sts-admissions@ucl.ac.uk

Materials for other Theory of Knowledge related lessons are available from STS:

<https://ucl.ac.uk/sts/tok>

The image credit for the "Specimen" image is "UCL Grant Museum of Zoology specimen x451". The formal scientific name of the specimen is *Duriavenator hesperis*. (Please do not tell this to students until AFTER the session.)