In this folder you will find a 2 day lesson on moths. The lesson helps illustrate an example of evolution to students. Students will develop a model for why the population of peppered moths has changed color over the past 60 years. This lesson is a continuation from the pre-assessment given on the first day of the Evolution Unit. Students will develop models that show the change in variation of a species over time. This model includes the initial variation of the species, the selection pressure, generations and offspring, and the final variation of the species. You will introduce the lesson to them with the PowerPoint and then students will look at 6 pieces of evidence and answer questions as they go through the evidence. Some will be looked at in groups and some in pairs as noted in the teacher packet. Lastly, students will look at models that explain the change in variation of a species over time. They will use an arrows diagram to link each piece of evidence to each model and this will be helpful for them in selecting the model they think is best. The models include the initial variation of the species, the selection pressure, generations and offspring, and the final variation of the species.

**Materials for the teacher**

Teacher guide. Filename: *PRACCIS Evolution Lesson 5 Teacher Packet*. The first item to look at is the teacher’s guide. This gives you a complete understanding of the lesson and how to implement it.

Teacher powerpoint slideshow. Filename: *PRACCIS Lesson 5 Moth Slides*. This is for the teacher to use throughout this unit. It includes slides with directions for what students should do, as well as background information.

Teacher powerpoint slideshow. Filename: *PRACCIS Moth Models.* This PowerPoint includes Models A,B,C, & D.

**Materials for the students**

Student packet. Filename: *PRACCIS Lesson 5 Moths Student Packet*. The student packet includes some information needed for the lesson as well as questions for students to answer individually and in pairs or groups.

Additional Handouts. There is 1 additional handout associated with this lesson.

*PRACCIS Lesson 5 Moths Evidence 1-6*. This is a one-page summary of all the evidence for the students to have in front of them at selected points in the lesson (see teacher’s guide).

**Summary of where to find models and evidence**

**Four models and six pieces of evidence are used in this lesson.**

Model A first appears on slide 12 of the teacher powerpoint.

Model B first appears on slide 13 of the teacher powerpoint.

Model C first appears on slide 14 of the teacher powerpoint.

Model D first appears on slide 16 of the teacher powerpoint.

Evidence 1 through 3 first appears on page 1 of the student packet and slide 5 of the teacher powerpoint.

Evidence 4 through 6 are in the student evidence sheet. .

All of the pieces of evidence are summarized on the evidence summary sheet handout for the students.

All of the models are summarized on the second teacher powerpoint.

\*We recommend reading the teacher’s guide first and then familiarizing yourself with the rest of the materials.