

Sharks4Kids MS Unit 1 Activity 1: Shark Models (Engage, Explore, Explain) Section 1: A Whirlwind Tour of the Shark (Anatomy, Senses, Reproduction)

Conceptual models can help students develop an understanding and deepen their learning about a particular subject.

- 1.Before even beginning the slideshow, have students create a model (SEP) of a shark. In their models, students should include as much information as they know about all the parts of the shark and what they do to help the shark survive.
- 2.Students could create their models individually, in partners, or small groups (3-4). Their models must include drawings, labels, and explanations for how the parts of the model connect to science.
- a.Ex: Student draws a picture of a shark, and labels the gills. They might explain that the shark's gills are in charge of breathing, allowing the shark to take in oxygen from the surrounding ocean water.
- b.Ex: Student shark picture shows the shark eating a fish. The fish and shark should be labeled. The sharks mouth, teeth, etc should be labeled. There should then be an explanation that the shark is eating the fish, with an explanation of why the shark is eating the fish.
- c. The teacher should encourage students to include as much detail as possible in their labels and explanations.
- d.Here are a couple of sample models of photosynthesis to show what we mean by drawings, labels, explanations
 - i. Example Models Low, Medium, High
- ii.Optional Extra Have students turn to another group/peer and explain their models. Give students a few minutes to add to their models in a different color (this way they can see and the teacher can see how their model has been revised with new learning).
 - iii.Go through the slideshow section on anatomy.
- iv. When finished, have students go back and revise their models again using a new color. Students shouldn't erase incorrect information, but should instead put a line through it so that they can see how their learning has changed over time. Teachers can explain that this is what scientists do in their lab notebooks. No erasing allowed...just modifying!