LESSON 1: SCIENTIST SHARK DIVE!
Shark Unit. Lesson 1: Grades 6-8

ESSENTIAL QUESTION OF THE DAY (EQOD):

What type of scientists study sharks, and what do they already know about them?

MATERIALS:
- Shark species ID handouts (1 copy of each; 11 total)
- Shark Dive Data Sheet (1 per student) or students can copy the format into their science journals
- Video # 1 - https://youtu.be/wUb3YCPm4bY
- Video # 2 - https://youtu.be/xIxR1xz9n2A
- Poster Paper
- Printer Paper
- Colored Pencils

SCIENTIFIC ROLES:
- Ecologist -- Diet & Conservation
- Zoologist -- Behavior & Husbandry
- Oceanographer -- Distribution & Geography
- Ichthyologist -- Appearance & Jaw Characteristics
Procedure:

ENGAGE

1. Show the class video # 1.
2. After watching, ask students, “Why do you think a fear of sharks exists?” (3 min.)
   → Each group will copy down as many responses as they can in the 3 minute span.
3. Groups will take turns presenting their reasoning.
   → Copy responses onto board
4. After each group has had the chance to share their findings. Show the class video # 2.
5. After watching, ask students, “Has your opinion on sharks changed after watching the second video?”
   → Think, Pair, Share within their groups (3 min.)

6. During the Think, Pair, Share (or your choice of discussion techniques), organize the students as such:

1.) Number of students 1-4, to determine their scientific roles. Each student will be assigned one role.
   1 - Ecologist
   2 - Zoologist
   3 - Oceanographer
   4 - Ichthyologist
Hand Out:
1 ‘Shark Dive Data Sheet’ Handout per group (or 1 per student)

EXPLORE

1. Set up 4 identical stations within each half of the classroom. ‘Shark Species ID Sheets’ can be distributed/placed as follows:
   *Placing these ID Sheets prior to class may save a headache of distribution during activities*

   Station 1: Gray Reef Shark, Blacktip Shark, Spinner Shark
   Station 2: Spottail Shark, Hardnose Shark, Silky Shark
   Station 3: Pigeye Shark, Dusky Shark, Scalloped Hammerhead Shark
   Station 4: Sandbar Shark, Smooth Hammerhead Shark

2. Allow scientists time at each station to complete all 11 of their shark species data sheets.

   Upon completion, have students return to their desks

EXPLAIN

1. Ask students to group up according to Scientific Roles. (e.g. zoologists meet as a group, ichthyologists meet as a group, etc.)
2. Give the groups 10-15 minutes to discuss their findings/fill in any missing information with their colleagues.
3. Students with different roles form groups to collaborate.

   Ask students to get together in mixed groups, so that each group has all 4 scientific roles represented.
4. Provide each group poster paper as a means to display their findings.
5. Hang completed graphics around the classroom so that they are representative of an art gallery!

   These graphics should remain on the walls throughout the shark unit, for student reference.
ELABORATE & EVALUATE

As an assessment piece, have each student choose his/her favorite shark species from the ‘Shark Dive’ lesson and complete a 1-Pager showing what they have learned.

1-Pager Requirements:
1. A clear & obvious title (with common & scientific name!)
2. A border that shows each scientist & their roles.
3. 2 visual images that relate to your shark species (drawing, magazine cut-out, etc.)
4. Ask two Costa’s Level 2 or 3 questions about your shark and answer them.
5. Ask a question about your shark that you do not know the answer to. Write the type of scientist that would be responsible for answering that question.
6. Write 5 notable vocabulary words or phrases around the images.
7. Fill the entire page!
8. Use Color!
9. WRITE YOUR NAME!