



MEROPLANKTON I.D. + JOURNAL
STEAM ACTIVITY
CREATED FOR CABRILLO MARINE AQUARIUM
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MEROPLANKTON I.D. + JOURNAL

WHAT IS MEROPLAKTON?

Meroplankton are zooplankton (animal) organisms that will spend only part of their life cycle as floating plankton and usually grow to their adult stage as non-planktonic organisms (nekton). Many invertebrates and some vertebrates in the ocean begin their life cycle as plankton! From many fish species (Grunion! Even Mola Mola!) whose eggs and larvae have planktonic stages, to all echinoderms, many crustaceans, marine snails, and so many more organisms. They may or may not spend a long time as plankton, but it is an important stage for many reasons.

Sometimes Meroplakton have clues to their adult stages in their body shape that are easy to pick up on, sometimes not so easy to make a match! In the activity below you will choose 5 animals that you suspect have a planktonic life stage. Research to make sure, and if you find any that are not at all planktonic, switch it out for a new animal and do your research. Once you have 5 animals that have both a planktonic stage and an adult stage that is non-planktonic then you're ready! Try to pick animals from different phylums (one fish, one crustacean, one mollusk etc...)

OCEAN ANIMAL LIST (HINTS: CRABS, FISH, ECHINODERMS, CNIDARIANS, MOLLUSKS, ETC...)

- 1.
- 2.
- 3.
- 4.
- 5.

What are some ideas you can think of why being planktonic for only part of their life cycle might help some animals reproduction and survival? Try and give some explanations or examples to support your ideas:

GETTING STARTED: WHAT TO FOCUS ON WHEN JOURNALING

- Accuracy / Recording detail
- Information - make notes, use words to explain your sketch / or for things you can't easily sketch
- Recording your ideas / questions
- Notate color, texture, and any other identifying features of organism body structure or function
- Comparisons: we want to compare what is similar and different from the planktonic stage to the Nekton /Adult stages.
- Anything else interesting, fun, funny, creative to note?
- Add color if you have time, even a little bit can help make the sketch more accurate
- Do more research if you have time to answer or get ideas about questions that might have come up about the organism

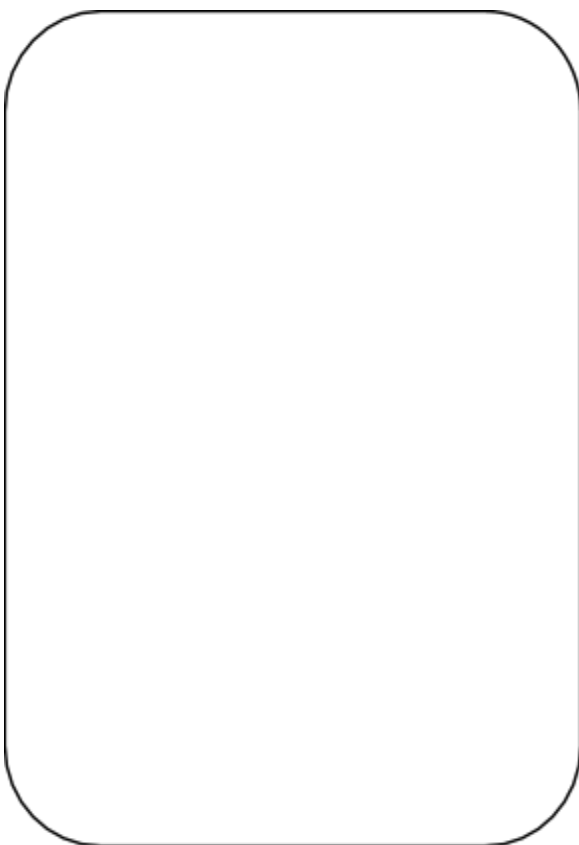
You can print the last 3 pages and complete them for all five organisms. And if you really want to learn more Meroplankton - complete the sketching journal page for as many animals as you're interested in learning about! Use CMA online resources or web searches to help find a picture of your animal in planktonic form (using the scientific name helps).

HAVE FUN SKETCHING AND LEARNING ABOUT THE PLANKTONIC STAGES
OF YOUR FAVORITE OCEAN ANIMALS!

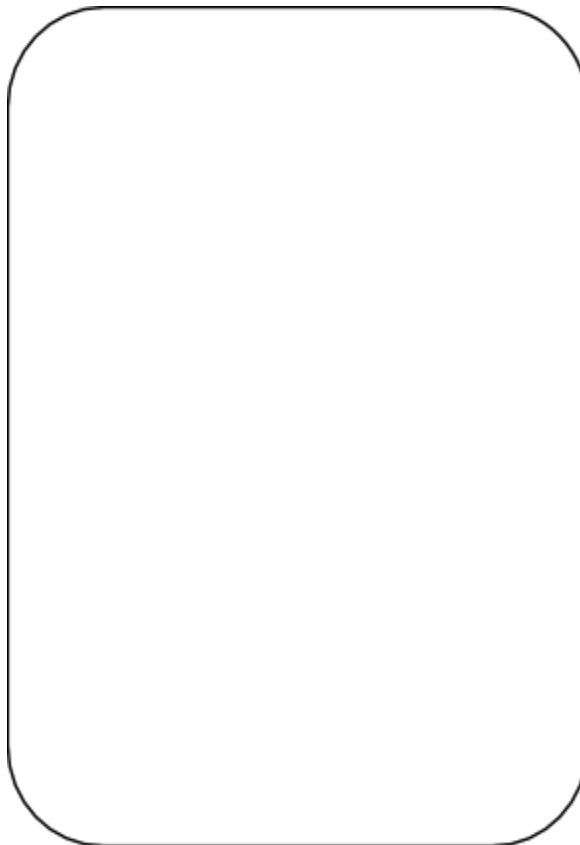
PLANKTON I.D. + JOURNAL

COMMON NAME _____
SCIENTIFIC NAME _____

PLANKTONIC STAGE



ADULT





JOURNAL NOTES

WHAT DO YOU KNOW ABOUT THIS ORGANISM?

WHAT ABOUT IT'S PLANKTONIC BODY SHAPE DID YOU FIND INTERESTING OR SURPRISING?

WHAT DO YOU NOTICE ABOUT IT'S BODY THAT GIVES HINTS OR CLUES IN THE PLANKTONIC STAGE TO WHAT THIS ANIMAL MIGHT BE?

WHAT QUESTIONS DID YOU HAVE WHILE EXAMINING THIS SPECIMEN?

FROM YOUR OWN OBSERVATIONS, FIRST COME UP WITH YOUR OWN IDEA OR ANSWER TO AT LEAST ONE OF YOUR OWN QUESTIONS:

DO SOME RESEARCH: WHAT DID YOU FIND OUT ABOUT YOUR QUESTION AND YOUR OWN IDEAS/ANSWERS? WHAT NEW INFORMATION DID YOU LEARN BY RESEARCHING FURTHER? ARE THERE ANY WAYS TO EXPAND OR CHANGE THE ORIGINAL ANSWER YOU GAVE TO THE QUESTION?

