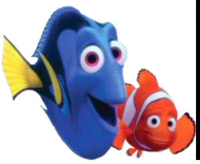

Master Lesson Guide for Teachers

1. Lesson info, instructions for making saltwater
2. Answer Key for Quiz
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4. Water Log Sheet (printable handout)

Provided by Squishy Tanks

🪼 ALWAYS 100% FREE, NO TENTACLES ATTACHED!

Hey there, future jellyfish experts!

Before your jellyfish can move into their new home, we need to make the water super safe and comfortable for them. Think of this as setting up the perfect bedroom for your new underwater friends!

1. Master Lesson Guide for Teachers

Lesson 1: Preparing the Water for Your Jellyfish Tank Squishy Tanks 🪼

Objective: Students will learn how to safely prepare saltwater and understand why we must wait before adding jellyfish.

Materials Needed (per group or class demo):

- Reverse Osmosis or Distilled water
- Marine salt mix
- Hydrometer
- Clean mixing container (1-gallon jug or 5-gallon bucket)
- Aquarium pump
- Saltwater test kit (ammonia, nitrite, nitrate, pH)

- Thermometer

Teaching Steps:

1. **Explain the Goal** Jellyfish need clean ocean-like water. We must mix salt correctly and let beneficial bacteria grow for about 2 weeks.
2. **Step 1: Mix Saltwater** Fill container with RO/Distilled water. Turn on pump. Slowly add marine salt while stirring. Let sit overnight to reach room temperature.
3. **Step 2: Test Salinity** Ideal range: 30–33 ppt or 1.023–1.025 SG. Use hydrometer and tap off bubbles.
4. **Step 3: Test Water Chemistry** Use test kit to check ammonia (0), nitrite (0), nitrate, and pH.
5. **Step 4: The Waiting Period** Explain the Nitrogen Cycle: Waste → Ammonia (toxic) → Nitrite (toxic) → Nitrate (safe) Beneficial bacteria do this work over ~2 weeks.

Teacher Tips:

- Emphasize patience — adding jellyfish too early can harm them.
- Use diagrams showing micro critters eating all the bad ammonia/nitrites and pooping out Nitrates. This typically get's a few laughs, and in a clean way, even though it's toxic… see what I did there.

Answer Key for Quiz

1. B

2. A

3. B

4. B

5. C

6. D

7. A

8. D

9. D

10. B

11. Any answer if correct, and a fun way to get children engaged in a open class discussion.

Lesson 1 Preparing the Water for jellyfish! 🪼

Name: ____ **Date:** _______________

Circle the correct answer for each question.

1. Jellyfish need water that is similar to:

   a) A swimming pool
   b) The ocean
   c) A freshwater lake
   d) Tap water

2. What should you **never** use when mixing saltwater for jellyfish?

   a) Tap water
   b) Marine Salt
   c) Reverse Osmosis water
   d) Distilled water

3. What tool is used to measure salinity?

   a) Thermometer
   b) Hydrometer
   c) pH meter
   d) Stopwatch

4. The ideal salinity range for moon jellyfish is:

   a) 10–15 ppt
   b) 30–33 ppt
   c) 40–45 ppt
   d) 0 ppt

5. Which chemical is the most toxic to jellyfish when the tank is new?

   a) Nitrate
   b) Salt
   c) Ammonia
   d) Oxygen

6. How long should you usually wait before adding jellyfish?

   a) 1–2 days
   b) About 2 hours
   c) 1 month
   d) About 2 weeks

7. What do beneficial bacteria do in the aquarium?

   a) Break down toxic waste
   b) Get in the way of jellyfish
   c) Eat the jellyfish
   d) Cool the water down

8. The process where bacteria turn ammonia into nitrite and then nitrate is called:

   a) The oxygen cycle
   b) The ocean cycle
   c) The salt cycle

d) The nitrogen cycle

9. Why is it important to wait before adding jellyfish?

a) So the water can get cold
b) Because shipping them takes too long
c) So the salt can disappear
d) So beneficial bacteria can grow and clean the water

10. What temperature range do jellyfish like best?

a) 40–50°F
b) 60–78°F (ideal 65–74°F)
c) 85–95°F
d) 30–40°F

15. If I could have any sea creature in the ocean as my pet and friend,

I would have a pet ____

And I would name it____

** ☑ Student Water Log Sheet**

Squishy Tanks – Waiting for Jellyfish! 🪼

Name: ______________________________ **Class:** _______________

Instructions:
Test your tank water every day (or every other day). Write the numbers in the boxes. When everything is safe (Ammonia = 0 and Nitrite = 0), we can add jellyfish!

Date	Salinity	Ammonia	Nitrite	Nitrate	pH