



# Chapter 1: From Zero to Hero

## The Olympics, Volleyball & Ice Hockey

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### Section A: The Olympics – Very Short Answer Questions

1. **What are the Olympics?**  
**Answer:** The Olympics are a big international sports event where athletes from different countries compete.
2. **What rewards do Olympic winners receive?**  
**Answer:** Gold, silver, or bronze medals.
3. **How often are the Olympics held?**  
**Answer:** Every four years.
4. **Name two sports played in the Olympics.**  
**Answer:** Running and swimming.  
(Accept others like jumping, soccer, basketball)
5. **Name two sports included in the Summer Olympics.**  
**Answer:** Athletics and swimming.  
(Accept: soccer, basketball, gymnastics)
6. **Name two sports included in the Winter Olympics.**  
**Answer:** Skiing and ice hockey.  
(Accept: snowboarding, bobsleigh)

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### Section B: Olympic Symbols

7. **Name two Olympic symbols.**  
**Answer:** Olympic Rings and Olympic Flame.
8. **What do the Olympic Rings represent?**  
**Answer:** The five continents.
9. **Name the five continents shown in the Olympic symbol.**  
**Answer:** Africa, the Americas, Asia, Europe, and Oceania.
10. **What do the Olympic colors stand for?**  
**Answer:** They appear on almost all national flags and represent friendship and togetherness.

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## Section C: Volleyball

**11. What is volleyball?**

**Answer:** A team sport where players hit a ball over a net using their hands or arms.

**12. How many players are there in one volleyball team?**

**Answer:** Six players.

**13. Where can volleyball be played?**

**Answer:** Indoors or outdoors.

**14. Name two things needed to play volleyball.**

**Answer:** Volleyball and net.

*(Accept: court, knee pads)*

**15. How many hits is a team allowed before returning the ball?**

**Answer:** Three hits.

**16. How many points are needed to win a volleyball game?**

**Answer:** 25 points with a two-point difference.

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## Section D: Ice Hockey

**17. What is ice hockey?**

**Answer:** A team sport played on ice using skates and a puck.

**18. How many players are there in one ice hockey team?**

**Answer:** Six players.

**19. What is the puck?**

**Answer:** A small, black, flat disk.

**20. What surface is ice hockey played on?**

**Answer:** An ice rink.

**21. What is the job of the goalie?**

**Answer:** To defend the goal.

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## Section E: Fill in the Blanks

**22. The Olympics are held every \_\_\_\_\_ years.**

**Answer:** four

**23. Olympic winners receive \_\_\_\_\_ medals.**

**Answer:** gold, silver, and bronze

**24. Each volleyball team has \_\_\_\_\_ players.**

**Answer:** six

**25. Ice hockey players wear \_\_\_\_\_ to move on ice.**

**Answer:** ice skates



## Section F: Thinking Questions

26. **Why is teamwork important in sports like volleyball and ice hockey?**

**Answer:** Because players must work together to win the game.

*(Accept suitable answers.)*

27. **Which sport from this chapter do you like most and why?**

**Answer:** *Student's own answer.*



## Chapter 2: Think and Blink

### Parts of the Eye, How We See & Prosthetic Eye

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#### Section A: Very Short Answer Questions

1. **What is the cornea?**

**Answer:** The cornea is the clear front window of the eye that helps focus light.

2. **Which part of the eye is the colored part?**

**Answer:** The iris.

3. **What is the pupil?**

**Answer:** The black spot in the center of the eye that controls how much light enters.

4. **Which part of the eye works like a magnifying glass?**

**Answer:** The lens.

5. **Which part of the eye is like a screen that collects light?**

**Answer:** The retina.

6. **What is the white part of the eye called?**

**Answer:** The sclera.

7. **Which part carries signals from the eye to the brain?**

**Answer:** The optic nerve.

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#### Section B: Functions of Eye Parts

8. **What is the function of the iris?**

**Answer:** It controls how much light enters the eye.

9. **What does the lens do?**

**Answer:** It focuses light onto the back of the eye.

10. **What is the role of the retina?**

**Answer:** It changes light into signals for the brain.

11. **Why is the optic nerve important?**

**Answer:** It sends visual signals from the retina to the brain.

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## Section C: How Do We See?

12. **Where does light enter the eye first?**

**Answer:** Through the cornea.

13. **Which two parts control the amount of light entering the eye?**

**Answer:** The iris and the pupil.

14. **Where does the light go after passing through the pupil?**

**Answer:** To the lens.

15. **What happens to light at the retina?**

**Answer:** It is converted into signals.

16. **What does the brain do with the signals it receives?**

**Answer:** It puts them together to form an image.

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## Section D: Fill in the Blanks

17. The \_\_\_\_\_ is the clear front part of the eye.

**Answer:** cornea

18. The \_\_\_\_\_ controls how much light enters the eye.

**Answer:** iris

19. The retina sends signals through the \_\_\_\_\_ nerve.

**Answer:** optic

20. The sclera is the \_\_\_\_\_ part of the eye.

**Answer:** white

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## Section E: Prosthetic Eye

21. **What is a prosthetic eye?**

**Answer:** An artificial eye made to replace a missing or damaged eye.

22. **How is a prosthetic eye similar to a real eye?**

**Answer:** It looks similar from the outside.

23. **How is a prosthetic eye different from a real eye?**

**Answer:** It cannot see or send signals to the brain.

24. **Can a prosthetic eye move like a real eye?**

**Answer:** No, it usually cannot move on its own.

25. **Why do people use prosthetic eyes?**

**Answer:** To look natural when a real eye is missing.

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## Section F: Thinking Questions

26. **Why is the eye often compared to a camera?**

**Answer:** Because both have parts that focus light and form images.  
(Accept suitable answers.)

27. **Why do you think scientists are still researching prosthetic eyes?**

**Answer:** To improve their function and appearance.  
(Accept reasonable student responses.)

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## Chapter 3: Deep into the Blue

### Marine Biology, Marine Life & Ecosystems

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#### Section A: Very Short Answer Questions

1. What is marine biology?  
**Answer:** The study of life in the ocean.
2. What does a marine biologist do?  
**Answer:** They study how marine animals and plants live, grow, and interact, and help protect them.
3. Name one type of chemical pollution in oceans.  
**Answer:** Industrial runoff or pesticides.
4. What is plastic pollution?  
**Answer:** Plastic waste like bottles, bags, and microplastics in the ocean.
5. What is noise pollution in the ocean?  
**Answer:** Loud sounds from ships, drilling, and underwater construction that disturb marine animals.
6. What tiny animals make up coral reefs?  
**Answer:** Coral polyps.
7. Give an example of a top predator in the ocean.  
**Answer:** Shark (e.g., Great White Shark).
8. Name a tiny plant in the ocean that produces oxygen.  
**Answer:** Phytoplankton.
9. Name one marine mammal.  
**Answer:** Bottlenose Dolphin.
10. What is the largest marine habitat on Earth?  
**Answer:** The deep sea.

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#### Section B: Functions and Roles

1. Why are coral reefs important?  
**Answer:** They provide homes and food for thousands of marine species.
2. What role do sharks play in the ocean?  
**Answer:** They help maintain the balance of marine ecosystems.
3. Why is phytoplankton important for Earth's climate?  
**Answer:** It produces oxygen and absorbs carbon dioxide.
4. What is the role of marine biologists in pollution control?  
**Answer:** They research the effects of pollution, create conservation strategies, and develop technological solutions.
5. Why are mangrove forests important?  
**Answer:** They protect coastlines and provide habitats for many marine creatures.

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## Section C: How Marine Ecosystems Work

1. Where do deep-sea creatures live?  
**Answer:** In extreme pressure and darkness.
2. Which two regions are considered polar marine ecosystems?  
**Answer:** Arctic and Antarctic.
3. What kinds of animals live in polar regions?  
**Answer:** Penguins, seals, and polar bears.
4. What is the function of the lens in corals' ecosystem analogy? (*thinking*)  
**Answer:** Coral reefs focus on providing structure and shelter for marine life. (*Accept student reasoning.*)
5. How do human activities affect marine life?  
**Answer:** Pollution and overfishing can harm marine animals and ecosystems.

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## Section D: Fill in the Blanks

1. Marine biologists study animals and plants in the \_\_\_\_\_.  
**Answer:** ocean
2. \_\_\_\_\_ reefs are made of tiny animals called coral polyps.  
**Answer:** Coral
3. \_\_\_\_\_ are top predators that help balance ocean ecosystems.  
**Answer:** Sharks
4. Phytoplankton produce \_\_\_\_\_ and absorb \_\_\_\_\_.  
**Answer:** oxygen, carbon dioxide
5. Mangrove forests grow in \_\_\_\_\_ water along coastlines.  
**Answer:** salt

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## Section E: Pollution and Conservation

1. What is chemical pollution?  
**Answer:** Harmful chemicals like oil, pesticides, and heavy metals entering oceans.
2. How does plastic pollution affect marine life?  
**Answer:** Animals may eat plastic or get entangled, harming them.
3. Can noise pollution affect whales and dolphins?  
**Answer:** Yes, it can disrupt their communication and navigation.
4. Name one way marine biologists help reduce pollution.  
**Answer:** Researching, creating conservation strategies, or developing technology.
5. Why is studying ecosystems like the deep sea and polar regions important?  
**Answer:** They are rapidly changing due to climate change and are critical to understand marine life.

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## Section F: Thinking Questions

1. Why are sharks called “top predators” and why are they important?  
**Answer:** They are at the top of the food chain and help maintain ecosystem balance.
2. How do you think protecting coral reefs benefits humans?  
**Answer:** They support fish populations, protect coastlines, and attract tourism.
3. Why might it be important to study tiny organisms like phytoplankton?  
**Answer:** They produce oxygen and regulate carbon dioxide, affecting Earth’s climate.
4. How can humans reduce their impact on marine ecosystems?  
**Answer:** By reducing pollution, preventing overfishing, and supporting conservation efforts.