

CLASS 4

EVS

NCERT SOLUTIONS

## NCERT Solutions for Class 4 EVS Chapter 7: How Things Work – Free PDF Download

---

Chapter 7 of the Class 4 EVS textbook Our Wondrous World is How Things Work. It introduces children to spinning objects, why things float or sink, and simple hands-on experiments and boat-making activities.

### Contents

NCERT Textbook Questions and Answers – Chapter 7: How Things Work

Class 4 EVS Chapter 7 – Notes and Extra Questions

Chapter 7 of the Class 4 EVS textbook *Our Wondrous World* is How Things Work. It introduces children to spinning objects, why things float or sink, and simple hands-on experiments and boat-making activities.

## NCERT Textbook Questions and Answers – Chapter 7: How Things Work

### Activity 1 (Page 105)

**Q1: Do you think all objects can spin? Make a list of a few objects that can spin.**

A: No, not all objects spin easily. Objects that can spin include a top, a wheel, a coin, a ceiling fan, and a spinning chair.

**Q2: Collect objects from the given table, spin them, and complete an observation chart documenting their spinning behaviour.**

A: Sample answer: a round coin spins smoothly and for a long time; a square eraser wobbles and stops quickly; a top spins fast and steadily due to its pointed base.

### Activity 2 (Pages 106–107)

**Q: Create spinners using cardboard, toothpicks, and pen tubes, then spin them and document your observations.**

A: Cut a cardboard disc, push a toothpick or pen-tube through its centre hole, and spin it on a flat surface — students note how smoothly and how long each spinner spins.

### Discuss (Page 108)

**Q1: Which of the spinners did not spin properly? Discuss the possible reasons.**

A: Spinners with an off-centre hole, an uneven shape, or a bent stick usually wobble and stop quickly instead of spinning smoothly.

**Q2: Have you noticed the position of the hole in the first two spinners? Did this difference in the position of the hole make a difference in the spinning of these spinners?**

A: Yes — a spinner with the hole exactly at the centre balances evenly and spins smoothly for longer, while one with an off-centre hole becomes unbalanced and stops quickly.

### Activity 3 (Pages 110–111)

**Q: Gather objects like leaves, nails, bowls, and bottles. Predict whether each will float or sink in water, then test and record results using 'F' and 'S'.**

A: Sample answer: leaf — F (float); nail — S (sink); empty plastic bottle (closed) — F (float); small stone — S (sink); an empty bowl placed carefully — F (float).

### Discuss (Page 111)

**Q: Did all the light objects float and all the heavy objects sink? Name the heavy objects that floated and lighter objects that sank.**

A: No — a large, heavy but hollow object like a bowl or closed bottle can float because of its shape, while some small but dense objects like a nail or a coin sink even though they are light in weight.

### Activity 4 (Page 112)

**Q: Investigate whether the shape of an object influences whether it floats or sinks.**

A: Sample answer: a flat sheet of aluminium foil floats, but the same foil crumpled into a tight ball sinks — showing that shape (not just the material) affects floating and sinking.

### Activity 5 (Pages 113–114)

---

**Q1: Design and construct boats using paper, cardboard, sticks, and clay in small groups, then display your creations.**

A: Students build simple boats from the given materials, shaping them so they can float and hold small weights without sinking, then test them in a tub of water.

**Q2: Compare your boat design with those created by other groups.**

A: Sample answer: boats with a wider, flatter base floated more steadily and carried more weight than boats with a narrow or pointed base.

### Let Us Reflect (Pages 115–116)

---

*(Exact page wording should be cross-checked against your physical copy.)*

**Enquire About Something: Ravi noticed his spinner slows down and stops after a while. List at least two questions Ravi could ask to find out why.**

A: Sample questions: “Why does the spinner slow down over time?” “Does friction with the ground or air cause it to stop?” “Would it spin longer on a smoother surface?”

**Figure It Out (a): A lever/see-saw system is tilted toward side A. How can you balance it?**

A: We can balance it by adding weight to side B, moving the load closer to the fulcrum on side A, or moving the pivot point until both sides balance.

**Figure It Out (b): Explain methods to make floating objects sink and sinking objects float.**

A: A floating object can be made to sink by adding weight to it or changing its shape to remove trapped air (like crumpling foil); a sinking object can be made to float by attaching it to something buoyant, like a piece of foam, or by changing its shape to trap air, like shaping clay into a boat.

**Do an Activity: Classify the given objects into “float” and “sink” categories.**

A: Students sort a fresh set of objects by testing them in water and placing each into a “float” or “sink” list based on the results.

## Class 4 EVS Chapter 7 – Notes and Extra Questions

Along with these NCERT Solutions, students can also use the [Class 4 EVS Chapter 7 Extra Questions](#) and [Class 4 EVS Chapter 7 Revision Notes](#) for quick revision and extra practice.

### Recommended: Buy the Printed NCERT Class 4 EVS Book

Contains Amazon affiliate links.

If you'd like a printed copy alongside the PDF, here's a verified option:

**Our Wondrous World Textbook of The World Around Us for Grade 4**

Rs. 56

Buy on Amazon →

Price and availability may change on Amazon. As an Amazon Associate, [ncertbooks.org](https://ncertbooks.org) earns from qualifying purchases.

---

© NCERTBooks.org — your one-stop source for Class 1 to 12 NCERT Books, Solutions, Extra Questions, Revision Notes, Formulas Handbooks and more. Visit [ncertbooks.org](https://ncertbooks.org) for the latest chapters as they are published.