

CLASS 6

SCIENCE

FORMULAS HANDBOOK

Class 6 Science Key Facts Handbook (Chapter-wise)

A chapter-wise, continuously updated handbook of key facts, definitions and concepts from the Class 6 NCERT Science textbook (Curiosity, 2026-27 edition). Each section below is added as the corresponding chapter's Solutions/Extra Questions/Revision Notes are published.

A chapter-wise, continuously updated handbook of key facts, definitions and concepts from the Class 6 NCERT Science textbook (Curiosity, 2026-27 edition). Each section below is added as the corresponding chapter's Solutions/Extra Questions/Revision Notes are published.

Chapter 1: The Wonderful World of Science (Curiosity)

Science is a way of thinking — observing, questioning, and finding out by doing.

Scientific way of thinking: Observation → Questioning → Hypothesising → Experimenting → Analysing.

Heat changes the state of water: heating causes evaporation, cooling causes freezing.

Chapter 2: Diversity in the Living World

[Solutions](#)

[Extra Questions](#)

[Revision Notes](#)

Chapter 3: Mindful Eating: A Path to a Healthy Body

[Solutions](#)

[Extra Questions](#)

[Revision Notes](#)

Chapter 4: Exploring Magnets

[Solutions](#)

[Extra Questions](#)

[Revision Notes](#)

Chapter 5: Measurement of Length and Motion

[Solutions](#)

[Extra Questions](#)

[Revision Notes](#)

Chapter 6: Materials Around Us

Matter: anything that has mass and occupies space

Lustre: lustrous (gold, steel) vs non-lustrous (wood, cotton)

Hardness: hard (iron, stone) vs soft (cotton, sponge)

Transparency: transparent (glass, water), translucent (butter paper), opaque (wood, metal)

Solubility: soluble (salt, sugar) vs insoluble (sand)

Behaviour with water: floats (wood, cork) vs sinks (iron, stone)

Glass is transparent, not translucent

Chapter 7: Temperature and its Measurement

Temperature: a reliable measure of hotness/coldness of a body

Normal human body temperature: 37.0°C (98.6°F)

Clinical thermometer (digital): measures body temperature; laboratory thermometer: range -10°C to 110°C

Correct reading: hold vertically, bulb not touching container, read while immersed, eye level with liquid column

Temperature stays constant while water boils or ice melts

Scales: Celsius, Fahrenheit, Kelvin (SI unit); $\text{Kelvin} = \text{Celsius} + 273.15$

Absolute zero $\approx -273.15^{\circ}\text{C}$ (0 K)

Chapter 8: A Journey through States of Water

States of water: solid (ice/snow), liquid (water), gas (vapour)

Evaporation: liquid $\rightarrow$ vapour, continuous even at room temperature

Condensation: vapour $\rightarrow$ liquid on a cold surface

Melting: solid $\rightarrow$ liquid; Freezing: liquid $\rightarrow$ solid

Evaporation speeds up with: higher temperature, larger surface area, more wind, lower humidity

Evaporation causes cooling (sweating, matka, wet-cloth cooling)

Water cycle: evaporation $\rightarrow$ condensation (clouds) $\rightarrow$ precipitation $\rightarrow$ collection $\rightarrow$ repeat

Chapter 9: Methods of Separation in Everyday Life

Handpicking: manual, for small quantities of visible impurity

Threshing then winnowing: loosens grain from stalks, then blows away husk with wind

Sieving: separates solid-solid mixtures by particle size

Sedimentation then decantation: heavier solids settle, then clear liquid is poured off

Filtration: removes insoluble solids from a liquid via a porous filter; output is the filtrate

Evaporation: recovers a dissolved solid (e.g. salt) by turning liquid to vapour

Churning: agitation separates butter from buttermilk

Magnetic separation: a magnet pulls out magnetic material

Chapter 10: Living Creatures – Exploring their Characteristics

Characteristics of living things: movement, growth, nutrition, respiration, excretion, response to stimuli, reproduction

Seed germination needs: water, air, suitable light/darkness (varies by seed)

Shoots grow toward light; roots grow downward, regardless of orientation

Stomata: tiny pores through which plants breathe

Mosquito life cycle: egg → larva → pupa → adult

Frog life cycle: spawn → tadpole (with tail) → tadpole (with legs) → froglet → adult

Chapter 11: Nature's Treasures

Natural resources: air, water, soil, minerals, forests, sunlight

Air: mixture of gases, mainly nitrogen (~78%) and oxygen (~21%)

Renewable resources: replenished naturally in a short time (sunlight, water, air, forests if managed well)

Non-renewable resources: limited, take millions of years to form (coal, petroleum, minerals)

Forest roots prevent soil erosion

Sunlight enables photosynthesis in green plants

Chapter 12: Beyond Earth

Solar system: Sun + 8 planets + moons, asteroids, comets; Earth is 3rd from Sun

Constellation: star pattern joined by imaginary lines (e.g. Big Dipper/Saptarishi, Orion)

Pole Star: appears fixed in northern sky; located via Big Dipper

Moon reflects sunlight; phases occur as visible sunlit portion changes

Natural satellite: Moon (Earth's only one); Artificial satellites: human-made (communication, weather, navigation)

Milky Way: our galaxy; universe has billions of galaxies