

Some Major Skills & Focus Areas

In Living Science 6–8

“**Creativity** refers to new ways of seeing or doing things and includes generating new ideas, flexibility, originality, and building on others’ ideas.”

– 21st Century Skills Handbook by CBSE



Creativity

- BK 6** pp. 11 (In the Library) 46, 122, 186 (In the Laboratory)
- BK 7** pp. 57, 104, 144, 168, 181, 199 (In the Laboratory)
- BK 8** pp. 36, 116, 181, 198, 209, 220 (In the Laboratory)



Critical Thinking

All HOTS Questions:

- BK 6** pp. 10, 22, 44, 78, 105, 136, 159, 185, 205
- BK 7** pp. 13, 23, 56, 80, 127, 167, 198, 223, 242
- BK 8** pp. 20, 64, 104, 137, 164, 197, 220, 256

HOTS QUESTIONS: Think and answer.

1. A bottle contains either salt or chalk. How will you find out what it has, without tasting it?
2. Think and write how you will separate a mixture of water, sand, salt and iron filings. You may have to use a method not given in the chapter to separate sand and iron filings. Think—which property of iron can be used for this?
3. A mixture of salt and sugar is prepared by grinding them together. Do the molecules of the salt and sugar undergo any change?
4. A saturated solution of sugar in water is prepared. The temperature of water is lowered by 5°C. Will the solution continue to be saturated? Give reasons.
5. Sea water has salt dissolved in it. You know that pure water can be obtained from sea water by distillation. However, this method is not used to get drinking water from sea water. What do you think is the reason?

HOTS QUESTIONS: Think and answer.

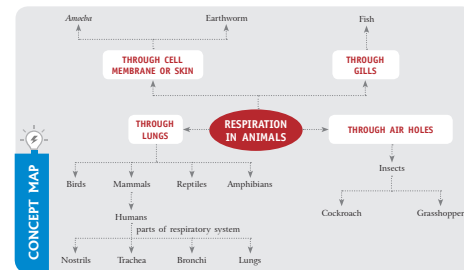
1. Fuse wires or miniature circuit breakers are not used in a circuit containing electric cells. Why?
2. Can you use a copper wire to make the filament of an electric bulb? Why?
3. Mohit used a fuse wire with a specification of 5 amperes in a circuit connected to an air conditioner which draws a current of 10 amperes. What will happen when the air conditioner is switched on? What will you advise him to do?
4. Rita used a fuse wire with a 100 amperes specification in a circuit at home which draws a maximum current of 20 amperes when all devices in the circuit are switched on. Do you think she used the correct fuse wire? What will you advise her to do?

Critical Thinking is the ability to think clearly and rationally and understand the logical connections between ideas; to analyze facts and come to a conclusion.

Communication

refers to the ability to express one’s opinions, desires, needs, apprehensions etc., appropriately—verbally and non-verbally.”

– 21st Century Skills Handbook by CBSE



BK 7, p. 125

Conceptual Understanding refers to an integrated and functional grasp of ideas.



Collaboration

- BK 6** pp. 11 (Talk to the Class), 60 (In the Library), 106 (In the Laboratory)
- BK 7** pp. 224 (Talk to the Class), 235 (In the Library)
- BK 8** pp. 22, 47 (Beyond the Classroom), 105 (In the Library)



Communication

All 'Talk to the Class':

- BK 6** pp. 11, 24, 60, 137, 206
- BK 7** pp. 45, 94, 156, 199, 224
- BK 8** pp. 46, 92, 105, 156

“**Collaboration** is the ability to effectively work together with others.”

– 21st Century Skills Handbook by CBSE

In the Library—Research Project

Group project When you dissolve salt in water, a solution is formed. The salt particles are so small that they cannot be seen and the solution remains clear. Add some mud to a beaker of water and stir it. Let it stand for some time. After the bigger insoluble particles settle down, the water still appears muddy. This is because small particles of mud remain suspended in water and do not settle down. Such a mixture is called a **suspension**. Its particles are bigger than that of a solution. Now look up for the word 'colloid' in a science encyclopaedia. What is the size of the particles in a colloid as compared to that in a suspension or a solution? Also look up the words 'aerosol', 'emulsion' and 'foam'. What type of colloids are these?

Beyond the Classroom—Field Trip

Visit a nearby farm.

- **Know the manures used in a farm** Ask the farmers which manures they prefer to use—chemical fertilizers or farm manures. Note down the reasons they give for their preference for various crops.

Try to grow some vegetables in your backyard or school garden. Which one will you use—chemical fertilizer, farm manure or a mixture of both?

- **Know the tools used by women farmers** Talk to some men and women farmers about farming and farm practices. You can ask questions like:

Which farm tools do they use? Do the male and female farmers prefer the same tools? If there is a difference in their preferences why is that so?

Which irrigation method do they practise?

Also, discuss with elders in the farm about the changes in agricultural practices over the last 50 years.

BK 6, p. 60; BK 8, p. 22

Problem-solving

All 'Be a Scientist':

- BK 6** pp. 22, 44, 69, 93, 170, 196
- BK 7** pp. 13, 36, 56, 80, 103, 143, 198, 234
- BK 8** pp. 21, 65, 164, 239

SKILLS – page 2

FOCUS AREAS – page 3

