

A landmark document, **the National Education Policy** 2020 (NEP) is a framework that emphasizes the holistic development of learners through experiential learning, arming them with twenty-first-century skills.

Ratna Sagar has always been at the forefront whenever any change is introduced by the government, the CBSE, the NCERT or other boards. We updated our books and provided support for:

- COMMUNICATIVE APPROACH
- NCF (2005) CCE (2010)
- NEP (2020) CBA (2021)
- NIPUN BHARAT (2021) SAFAL (2021)

All our major courses are fully compliant with NEP 2020 guidelines. Here we present Living Science 6-8.

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# **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)



#### 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)

#### Collaboration

is the ability to effectively work together with others. 11

- 21st Century Skills Handbook by CBSE

## BK 6, p. 59; BK 7, p. 210

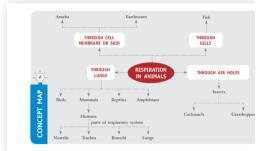
#### B HOTS QUESTIONS: Think and answer.

- 1. A bottle contains either salt or chalk. How will you find out what it has, without tasting it? 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.
- 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?

#### B 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?
- Mohi 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.



#### BK 7, p. 125

### Conceptual

Understanding refers to an integrated and functional grasp of ideas.

#### Communication

**Critical Thinking** 

BK 6 pp. 10, 22, 44, 78, 105, 136, 159,

BK 7 pp. 13, 23, 56, 80, 127, 167, 198, 223, 242 BK 8 pp. 20, 64, 104, 137,

164, 197, 220, 256

refers to the ability to

express one's opinions, desires, needs, apprehensions

and non-verbally.

etc., appropriately-verbally

- 21st Century Skills Handbook by CBSE

<sup>44</sup> Communication

All HOTS Questions:

185. 205

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	

In the Library—Research Project Group project When you disolve 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 backer of water and stir it. Let it stand for some time. After the bigger insoluble particles settle down, but water still appears muddy. This is because small particles of mud remain suspended in water and do not settle down. Such a mutture 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 Tip
  Wate a nearby farm.
  A now the manures used in a farm. Ask the farmers which manures they prefer to use-characterized fartilizers of farm manures. Note down the reasons they give for their preference for various crops.
  Ty grow some vegetables in your backyard or school garden. Which one will you use-chemical fertilizer, farm manure or a mixture of both?
  More the colo 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 farmale farmers prefer the same tools? If there is a difference in their preferences why is that so?
  Which irrigition method do they practic?
  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

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## **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

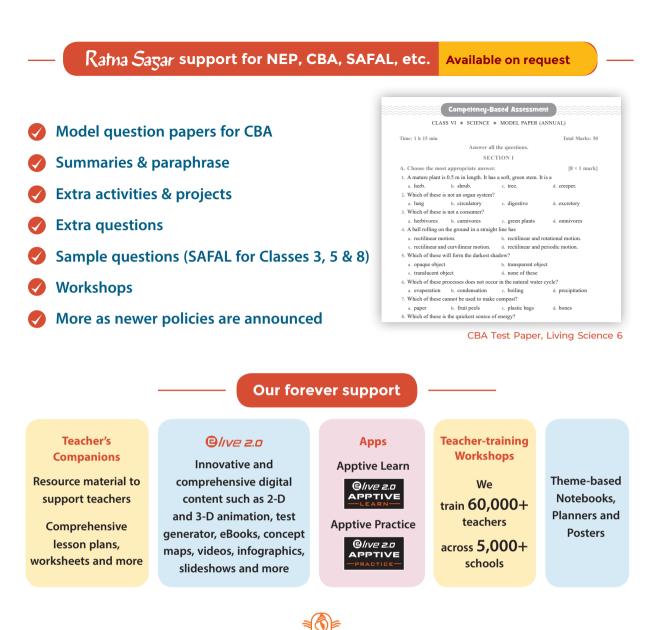
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BK 6, p. 56; BK 6, p. 182; BK 7, p. 43; BK 8, p. 177

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Forty years ago, **Rama Sazar** made a commitment to education with this pledge:

66 Ratna Sagar stems from a deeply-felt desire to present only the finest in books ... (our books) will represent exemplary standards of book publication and will embody the highest levels of teaching methodology, design and presentation, and pedagogical effectiveness. ??

We are proud to have lived up to our pledge. And we promise to continue doing so.

# **Education, Our Mission!**

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