

Food, Nutrition and Health

Science · Class 4 · Topic-wise Practice Worksheet

TIME 40 minutes	QUESTIONS 15	TOTAL MARKS 21	MAX. SCORE ___ / 21
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **15 questions** in this worksheet. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–12 carry **1 mark** each. Questions 13–15 (Achievers Section) carry **3 marks** each.
- There is no negative marking. Study every diagram and table carefully.

Section A — Scientific Reasoning

Q1–Q8 · 1 mark each

- Which nutrient is the body's main source of energy?
 (A) Carbohydrates (B) Proteins
 (C) Vitamins (D) Minerals
- A shortage of vitamin C causes _____.
 (A) Rickets (B) Night blindness
 (C) Goitre (D) Scurvy
- Which mineral is needed to make haemoglobin in the blood?
 (A) Iron (B) Calcium
 (C) Iodine (D) Sodium
- A shortage of iodine in the diet causes _____.
 (A) Scurvy (B) Goitre
 (C) Rickets (D) Anaemia
- Which vitamin does the body make when the skin is exposed to sunlight?
 (A) Vitamin A (B) Vitamin B
 (C) Vitamin D (D) Vitamin C
- The part of our food that is not digested but keeps the digestive system working smoothly is called _____.
 (A) Starch (B) Protein
 (C) Fat (D) Roughage
- Which of these methods of preserving food works by removing the water from it?
 (A) Drying (B) Freezing
 (C) Canning (D) Adding sugar
- Which of these is a **body-building** food?
 (A) Sugar (B) Pulses
 (C) Butter (D) Rice

9. The bar graph shows the energy given by 100 g of four foods. Which food gives the **most** energy from the same 100 g?

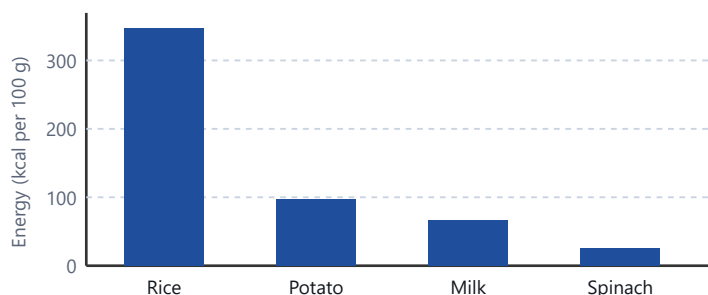


Fig. 9.1 — Energy content of four foods

- (A) Milk
(B) Potato
(C) Rice
(D) Spinach
10. In the table below, which row is **incorrectly** matched?

Row	Deficiency disease	Cause
(A)	Rickets	Lack of vitamin D
(B)	Night blindness	Lack of vitamin A
(C)	Anaemia	Lack of iodine
(D)	Scurvy	Lack of vitamin C

Table 10.1 — Deficiency diseases

- (A) Row (A)
(B) Row (B)
(C) Row (C)
(D) Row (D)
11. A few drops of iodine solution are put on a slice of raw potato and it turns blue-black. This shows that potato contains _____.
(A) Fat
(B) Protein
(C) Vitamin C
(D) Starch
12. Why is it advised to boil drinking water during the rainy season?
(A) Boiling kills the disease-causing germs in it
(B) Boiling adds minerals to it
(C) Boiling makes it sweeter
(D) Boiling removes its colour

Achievers Section

Q13–Q15 · 3 marks each

13. Consider the following statements.
(i) A balanced diet is exactly the same for every person.
(ii) Vitamins and minerals are needed in small amounts but are essential for health.
(iii) Overcooking vegetables destroys some of the vitamins in them.
Which of the statements is/are correct?
- (A) (i) and (ii) only
(B) (ii) and (iii) only
(C) (i) and (iii) only
(D) All three

14. Two identical slices of bread are left out for four days. Slice X is kept damp in a warm dark cupboard and slice Y is kept dry in a closed tin. After four days slice X is covered with mould while slice Y is unchanged. Which conclusion is best supported?
- (A) Bread always turns mouldy after four days
(B) Moulds grow well when moisture and warmth are available
(C) Darkness alone causes mould to grow
(D) Moulds can grow only on bread
15. Ravi's lunch is rice, chapati and a boiled potato. Which single addition would bring his meal closest to a balanced diet?
- (A) More rice
(B) A glass of sugar syrup
(C) Dal and a green vegetable
(D) A second chapati

Answer Key

1	A	2	D	3	A	4	B	5	C
6	D	7	A	8	B	9	C	10	C
11	D	12	A	13	B	14	B	15	C

Solutions

1. Answer: (A) Carbohydrates

Carbohydrates such as rice, wheat, potato and sugar are broken down quickly to release energy, so they form the largest part of most meals.

2. Answer: (D) Scurvy

Too little vitamin C causes **scurvy**, whose signs are swollen bleeding gums, loose teeth and wounds that heal slowly.

3. Answer: (A) Iron

Iron is needed to make haemoglobin, the red substance that carries oxygen round the body. Too little iron causes anaemia.

4. Answer: (B) Goitre

Too little iodine causes **goitre**, a swelling in the neck. This is why iodised salt is sold in shops.

5. Answer: (C) Vitamin D

Sunlight on the skin lets the body make **vitamin D**, which helps it absorb calcium from food and build strong bones.

6. Answer: (D) Roughage

Roughage, or dietary fibre, comes from the tough parts of fruits, vegetables and whole grains. It adds bulk to the food and prevents constipation.

7. Answer: (A) Drying

Drying removes the water that microbes need in order to grow, so the food does not spoil. Dried fish, papads and raisins are preserved this way.

8. Answer: (B) Pulses

Pulses are rich in protein, which builds new cells and repairs worn-out parts. Sugar and rice give energy and butter is mostly fat.

9. Answer: (C) Rice

The bar for **rice** is by far the tallest, reaching about 345 kcal, while potato gives about 97, milk about 67 and spinach only about 26. Rice supplies the most energy because it is very rich in carbohydrates.

10. Answer: (C) Row (C)

Anaemia is caused by a lack of **iron**, not iodine. A lack of iodine causes goitre. The other three rows are correct.

11. Answer: (D) Starch

Iodine solution is the standard test for **starch**: it changes from brown to blue-black wherever starch is present.

12. Answer: (A) Boiling kills the disease-causing germs in it

Rain washes germs from the ground into wells and pipelines. **Boiling kills those germs** and prevents diseases such as cholera, typhoid and diarrhoea.

13. Answer: (B) (ii) and (iii) only

Statement (i) is false — a growing child, a labourer and an elderly person all need different amounts, so a balanced diet differs from person to person. Statements (ii) and (iii) are both true; vitamin C in particular is destroyed by prolonged heating. Hence **(ii) and (iii)**.

14. Answer: (B) Moulds grow well when moisture and warmth are available

The two slices differed in moisture, so the moisture must explain the difference in the result. Mould spores float in the air everywhere, but they can grow only when they get moisture and warmth. This is exactly why food is preserved by drying.

15. Answer: (C) Dal and a green vegetable

Rice, chapati and potato are all carbohydrate-rich, so the meal already has plenty of energy but almost no protein, vitamins or minerals. Adding **dal and a green vegetable** supplies protein, vitamins, minerals and roughage. Every other option only adds more carbohydrate.