




# START UP MATHEMATICS


# ACTIVITY BOOK



3

**NEP-Aligned  
Skill Development and Practice**

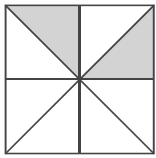
- 
- Discovery, discussion and analysis-based learning
  - Interdisciplinary and co-curricular strategy
  - HOTS, critical thinking and problem solving
  - Life skills
  - Experiential learning promoting exchange of ideas
  - Precisely mapped with Start Up Mathematics coursebook



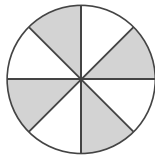
Effective **NEP**  
implementation  
tools for learning  
mathematics

**Observe and Answer**Skills Covered: • Observation • Analytical thinking  
• Decision making

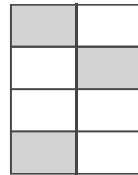
Look at the given figures and answer the following questions.



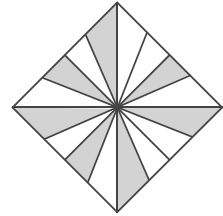
A



B



C

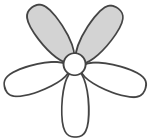


D

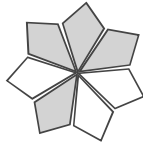
- (a) What shaded fraction is represented by figure C? \_\_\_\_\_
- (b) Which figure has the minimum shaded fraction? \_\_\_\_\_
- (c) Which figure has the maximum shaded fraction? \_\_\_\_\_
- (d) Which shaded fractions have the biggest and the smallest numerators? \_\_\_\_\_
- (e) Which figure represents  $\frac{3}{8}$ ? \_\_\_\_\_

**Life Skills**Skills Covered: • Awareness • Observation  
• Problem solving • Critical thinking**Avni Draws Beautiful Flowers**

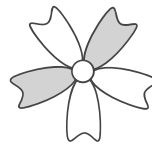
Avni draws beautiful flowers and shades some petals in each flower.



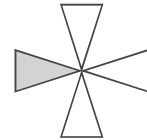
Flower A



Flower B



Flower C



Flower D

1. State the shaded fractions represented by all the four flowers.

Flower A Flower B Flower C Flower D 

2. Which flower has the biggest numerator? \_\_\_\_\_

3. Which flower has the smallest denominator? \_\_\_\_\_

## Values

Skills Covered: • Social and emotional skills • Awareness  
• Observation • Decision making

Class 3A has library period on every Monday. All the students visit library in the 5th period out of the 8 periods during the day. Sunita reads the sign board in the library which states 'Do not tear books. Book are our best friends.' Lalita observes 9 books on the solar system and 9 books on plants. These are thick books and so she takes only 2. Sonal looks at 12 storybooks on fairies. But she takes one storybook for reading. Harshit looks at 5 hindi storybooks of 'Panchtantra'. He takes 3 hindi storybooks.

Now answer the following questions.

1. What is the fraction of library period on Monday?
2. What fraction of the books on the solar system does Lalita borrow?
3. How should you take care of books in the school?

## Integrated Learning

Skills Covered: • In-depth learning • Critical and logical thinking  
• Observation • Reasoning

### Linking with Science

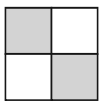
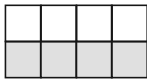
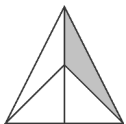
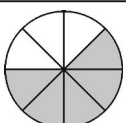
Find out the following information about our planet Earth.

1. What fraction of the Earth is covered with water? \_\_\_\_\_
2. What fraction of the Earth is covered with land? \_\_\_\_\_
3. What fraction of water present on the Earth is available for use? \_\_\_\_\_

## Apply Your Learning

Skills Covered: • Applicative thinking • Observation  
• Decision making • Problem solving

Match the columns.

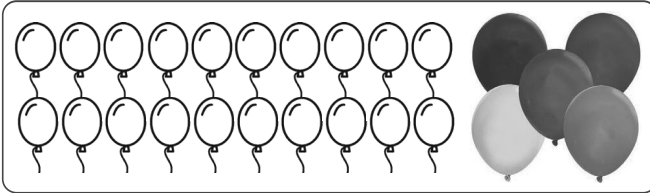
Column A	Column B	Column C
1. 	(a) $\frac{5}{8}$	(i) Four-eighths
2. 	(b) $\frac{2}{4}$	(ii) One-fourth
3. 	(c) $\frac{4}{8}$	(iii) Five-eighths
4. 	(d) $\frac{1}{4}$	(iv) Two-fourths

## Higher Order Thinking Skills

Skills Covered: • Observation • Critical and logical thinking  
• Problem solving • Reasoning

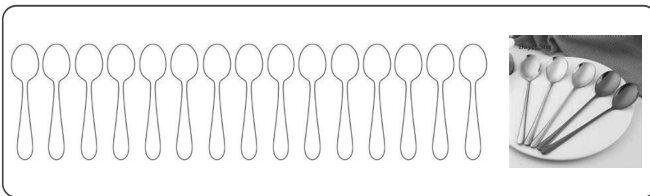
Which fraction do the following collections represent?

1.



- (a)  $\frac{1}{4}$  of 20    (b)  $\frac{1}{3}$  of 20  
(c)  $\frac{1}{2}$  of 20    (d)  $\frac{1}{5}$  of 20

2.




- (a)  $\frac{1}{4}$  of 15    (b)  $\frac{1}{5}$  of 15  
(c)  $\frac{1}{3}$  of 15    (d)  $\frac{1}{2}$  of 15

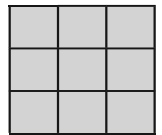
## Competitive Corner

Skills Covered: • Analytical thinking • Quantitative reasoning  
• Time management • Problem solving

Choose the correct answer.

1. What is the fraction of boxes  in two rows?

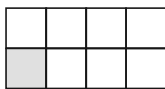
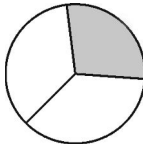
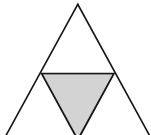
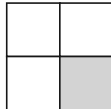
- (a)  $\frac{2}{9}$     (b)  $\frac{2}{3}$     (c)  $\frac{3}{8}$     (d)  $\frac{1}{9}$




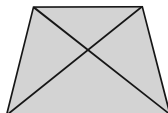
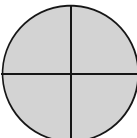
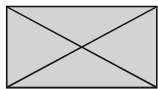
2. What is the numerator of the fraction  $\frac{16}{19}$ ?

- (a) 9    (b) 16    (c) 6    (d) 19

3. Which figure represents the shaded part as  $\frac{1}{3}$ ?

- (a)     (b)     (c)     (d) 

4. Which of the following figures is divided into four equal parts?

- (a)     (b)     (c)     (d) 

5. What fraction of the figure shown is unshaded?

- (a)  $\frac{1}{4}$     (b)  $\frac{4}{6}$     (c)  $\frac{2}{6}$     (d)  $\frac{2}{4}$

