

Student Name (6B)  
School Name  
(City)  
PAN No. -

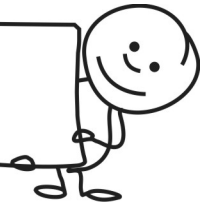
172149 / 0585 / J15

These are your Permanent ASSET Number (PAN) details. Your PAN is a unique identification number that allows performance tracking. Register this number at [www.ei-india.com/pancard](http://www.ei-india.com/pancard).



Also get 5% discount on EI's unique computer-based, self-learning tool Mindspark, which will help you improve on weaknesses identified by ASSET. For more information, visit [www.mindspark.in](http://www.mindspark.in).

## MyBook Contents



1. Personalised Student Feedback .....	2
2. Circular Skill Profile .....	3
3. Skill-based Summary .....	4
4. Score Card .....	5
5. Practice Questions and Explanations .....	9



## PERSONALISED STUDENT FEEDBACK

Dear Student Name,

### **Congratulations for taking the ASSET test!**

ASSET is a diagnostic test that tells you which skills you are strong at and which skills you should work on to develop further. The analysis given here is for all the subjects for which you have taken the ASSET test.

#### **Your main strengths are:**

- Understands the usage of grammar concepts (English)
- Identifies synonyms, antonyms and other words (English)
- Number sense, related concepts and basic number competency (Maths)
- Pre-algebra and algebra skills (Maths)
- Extraction, translation and application of knowledge or information (Science)
- Representing, relating or explaining scientific processes or observed phenomena (Science)

#### **Your main weaknesses are:**

- Analyses characters and situations (English)
- Identifies the main idea and purpose of the passage (English)
- Problem solving: advanced or challenging problems (Maths)
- Area and perimeter: concepts and computations (Maths)
- Classification/comparison of organisms/processes; giving examples (Science)
- Analysis of information to identify trends or properties (Science)

#### **Practice questions compiled especially for you!**

Here's a new feature to help you improve in your weak areas! In each subject, we have picked the two skills which includes the one skill listed above in which you have not performed so well and provided questions which you can practise. Answers to all these questions with explanations are provided at the end of this booklet.

Remember, this is your practice book - no other student taking ASSET would get exactly the same set of questions! So do them carefully and do write to us tell us if they helped and share any other comments or suggestions. You can email us at [info@ei-india.com](mailto:info@ei-india.com).

As you know, ASSET is offered in English, Maths and Science in classes 3-10 and in Hindi in classes 4-8 and Social Studies in classes 5-10. Practice questions are provided in all the subjects in which you took ASSET.

Read through your analysis carefully to know how you did on each skill and question. By working on your weak areas, you can easily improve and do better!

Best of luck!

Regards,

(Sridhar Rajagopalan)

# CIRCULAR SKILL PROFILE

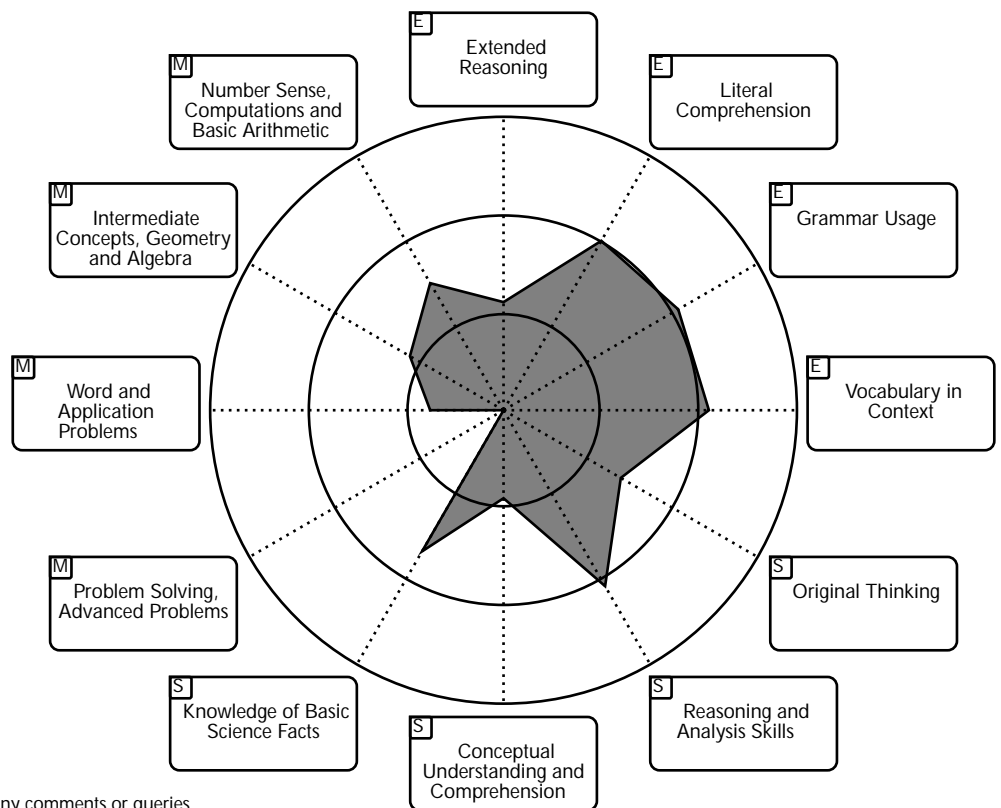


Student Name (6B)

The Circular Skill Profile represents your skills in the different subjects in a consolidated graphical form. It has 12 axes corresponding to 12 basic skills - 4 each in English (E), Mathematics (M) and Science (S).

Along each axis, the skill point corresponds to the level of performance on that skill. Skill points further away from the centre of the circle represent better performance.

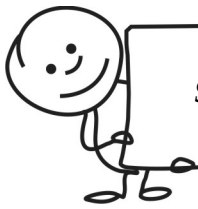
The shaded area formed by joining all the 12 skill points on the different axes represents overall performance in skill areas across subjects. A larger area represents better performance.



Please visit us at <http://www.ei-india.com> for any comments or queries.

## Understanding Skills

The main difference between the ASSET tests and the regular school tests lies in the fact that ASSET tests are SKILL-BASED. Skills or competencies refer to specific abilities that a student develops. A skill-based test can be contrasted with a fact- or memory-based test. In the latter type of tests, the student is asked to recall or reproduce facts more often than apply the concepts taught to them. However, most competitive exams, entrance tests as well as international admission tests (like the GRE) tend to be skill-based. This is because it is being widely appreciated that a student's understanding can be tested better with a skill-based test rather than a fact-based one. It is not as if facts and their recall are not important - however, they should not be overemphasized and ASSET helps you to do just this.



## SKILL-BASED SUMMARY AND STRENGTH/WEAKNESS ANALYSIS

Student Name (6B)

### ENGLISH

No.	Skill	Answered Right	Answered Wrong	Graph	S/W
1	Identifies synonyms, antonyms and other words	7,13,30,37,59		<div style="width: 75%; background-color: #cccccc;"></div>	S
2	Deduces word meanings from contextual clues	20,45	11,14,38	<div style="width: 45%; background-color: #cccccc;"></div>	
3	Knows correct spellings and phonics in words	32,44,54	53,55	<div style="width: 60%; background-color: #cccccc;"></div>	
4	Knows punctuation and sentence formation	15,57	31,46,56	<div style="width: 25%; background-color: #cccccc;"></div>	
5	Understands the usage of grammar concepts	47,48,49,50,51,52		<div style="width: 85%; background-color: #cccccc;"></div>	S
6	Identifies and recalls direct facts in the passage	2,9,17,36	27	<div style="width: 55%; background-color: #cccccc;"></div>	S
7	Understands organisation and context of the passage	1,12,19,24	18	<div style="width: 65%; background-color: #cccccc;"></div>	S
8	Understands idioms, proverbs and figures of speech	6,23	16,22,58	<div style="width: 30%; background-color: #cccccc;"></div>	
9	Identifies the main idea and purpose of the passage	21,35	3,8,29	<div style="width: 50%; background-color: #cccccc;"></div>	
10	Analyses characters and situations	33	4,25,28,41	<div style="width: 40%; background-color: #cccccc;"></div>	W
11	Infers using contextual clues and prior knowledge	26,34	5,10,60	<div style="width: 45%; background-color: #cccccc;"></div>	
12	Interprets the lines of a poem	40,42	39,43	<div style="width: 60%; background-color: #cccccc;"></div>	

### MATHEMATICS

No.	Skill	Answered Right	Answered Wrong	Graph	S/W
1	Number sense, related concepts and basic number competency	12,32	29	<div style="width: 35%; background-color: #cccccc;"></div>	
2	Arithmetic operations: four basic operations, properties	25,30	2,26	<div style="width: 55%; background-color: #cccccc;"></div>	
3	Factors and multiples	20	8,36	<div style="width: 30%; background-color: #cccccc;"></div>	
4	Fractions and decimals: concepts, use and conversions	9,21	5,14,34	<div style="width: 35%; background-color: #cccccc;"></div>	
5	Geometry: concepts and applications	1,13	6,22,38	<div style="width: 15%; background-color: #cccccc;"></div>	
6	Area and perimeter: concepts and computations		4,11,16,18	<div style="width: 0%; background-color: #cccccc;"></div>	
7	Pre-algebra and algebra skills	10,15,24	3,23	<div style="width: 50%; background-color: #cccccc;"></div>	
8	Applications in daily life: word/visual problems	19,31	33,37	<div style="width: 45%; background-color: #cccccc;"></div>	
9	Measurement and data interpretation		7,17,27,28	<div style="width: 0%; background-color: #cccccc;"></div>	
10	Problem solving: advanced or challenging problems		35,39,40	<div style="width: 0%; background-color: #cccccc;"></div>	

### SCIENCE

No.	Skill	Answered Right	Answered Wrong	Graph	S/W
1	Recollection or recognition of science facts and concepts	1,10,12	14,16	<div style="width: 40%; background-color: #cccccc;"></div>	
2	Definition or description of scientific terms, organisms or materials	7,15	2,11	<div style="width: 55%; background-color: #cccccc;"></div>	
3	Knowledge of use of scientific instruments, tools and procedures	13,24	8,9,18	<div style="width: 50%; background-color: #cccccc;"></div>	
4	Classification/comparison of organisms/processes: giving examples	17	5,19,23,27	<div style="width: 35%; background-color: #cccccc;"></div>	W
5	Representing, relating or explaining scientific processes or observed phenomena	3,4,6,21	26	<div style="width: 45%; background-color: #cccccc;"></div>	S
6	Extraction, translation and application of knowledge or information	20,22,28,45		<div style="width: 75%; background-color: #cccccc;"></div>	
7	Analysis of information to identify trends or properties	33	25,41,44	<div style="width: 30%; background-color: #cccccc;"></div>	
8	Advanced or complex data representation or interpretation	37,38	29,36	<div style="width: 55%; background-color: #cccccc;"></div>	
9	Integrating different concepts or information for decision making	30,31,43	34,42	<div style="width: 60%; background-color: #cccccc;"></div>	
10	Hypothesis formulation; design of apparatus or experiment	39	32,35,40	<div style="width: 45%; background-color: #cccccc;"></div>	

The graphs represent the percentage of questions answered correctly.  
 Skills where the performance is <25% are marked as W and >75% are marked as S.  
 Only skills having at least 5 questions are considered.

# ENGLISH SCORE CARD



Student Name (6B)

**Score: 35/60      Percentile: 73.7      Test taken in: Summer 2010**

Q	Skill Tested	1	2	3	4	Error Indicated
1	Understands organisation and context of the passage	A	A	✓	75%	-
2	Identifies and recalls direct facts in the passage	C	C	✓	49%	-
3	Identifies the main idea and purpose of the passage	A	C	x	39%	Main idea of the passage misunderstood
4	Analyses characters and situations	A	D	x	41%	Characters in texts not understood
5	Infers using contextual clues and prior knowledge	B	A	x	36%	Relationships in story not clear
6	Understands idioms, proverbs and figures of speech	B	B	✓	35%	-
7	Identifies synonyms, antonyms and other words	A	A	✓	38%	-
8	Identifies the main idea and purpose of the passage	D	C	x	26%	Main idea of the passage misunderstood
9	Identifies and recalls direct facts in the passage	B	B	✓	60%	-
10	Infers using contextual clues and prior knowledge	D	C	x	34%	Inference based on facts incorrect
11	Deduces word meanings from contextual clues	A	D	x	56%	Word meaning possibly confused
12	Understands organisation and context of the passage	D	D	✓	49%	-
13	Identifies synonyms, antonyms and other words	A	A	✓	49%	-
14	Deduces word meanings from contextual clues	A	D	x	51%	Word meaning possibly confused
15	Knows punctuation and sentence formation	A	A	✓	41%	-
16	Understands idioms, proverbs and figures of speech	C	B	x	35%	Idioms not understood
17	Identifies and recalls direct facts in the passage	C	C	✓	49%	-
18	Understands organisation and context of the passage	A	C	x	55%	Procedural sequence not clear
19	Understands organisation and context of the passage	B	B	✓	29%	-
20	Deduces word meanings from contextual clues	A	A	✓	69%	-
21	Identifies the main idea and purpose of the passage	D	D	✓	52%	-
22	Understands idioms, proverbs and figures of speech	C	B	x	58%	Idioms not understood
23	Understands idioms, proverbs and figures of speech	B	B	✓	52%	-
24	Understands organisation and context of the passage	B	B	✓	62%	-
25	Analyses characters and situations	A	D	x	36%	Situational context not understood
26	Infers using contextual clues and prior knowledge	D	D	✓	45%	-
27	Identifies and recalls direct facts in the passage	D	B	x	41%	Stated facts identified incorrectly
28	Analyses characters and situations	A	C	x	25%	Predictive facts analysed incorrectly
29	Identifies the main idea and purpose of the passage	C	A	x	36%	Main idea of the passage misunderstood
30	Identifies synonyms, antonyms and other words	B	B	✓	37%	-
31	Knows punctuation and sentence formation	A	D	x	63%	Error in Conjunctions
32	Knows correct spellings and phonics in words	A	*	✓	100%	(Question dropped - all given credit)
33	Analyses characters and situations	A	A	✓	43%	-
34	Infers using contextual clues and prior knowledge	D	D	✓	55%	-
35	Identifies the main idea and purpose of the passage	D	D	✓	54%	-
36	Identifies and recalls direct facts in the passage	B	B	✓	47%	-
37	Identifies synonyms, antonyms and other words	C	C	✓	43%	-
38	Deduces word meanings from contextual clues	B	D	x	26%	Word meaning possibly confused
39	Interprets the lines of a poem	A	B	x	38%	Poem interpreted incorrectly
40	Interprets the lines of a poem	D	D	✓	55%	-



## ENGLISH SCORE CARD

Student Name (6B)

Q	Skill Tested	1	2	3	4	Error Indicated
41	Analyses characters and situations	B	D	X	53%	Emotions in the poem not understood
42	Interprets the lines of a poem	B	B	✓	50%	-
43	Interprets the lines of a poem	A	C	X	33%	Poem interpreted incorrectly
44	Knows correct spellings and phonics in words	D	D	✓	38%	-
45	Deduces word meanings from contextual clues	A	A	✓	40%	-
46	Knows punctuation and sentence formation	A	C	X	45%	Sentence formation not clear
47	Understands the usage of grammar concepts	C	C	✓	53%	-
48	Understands the usage of grammar concepts	B	B	✓	45%	-
49	Understands the usage of grammar concepts	A	A	✓	62%	-
50	Understands the usage of grammar concepts	B	B	✓	50%	-
51	Understands the usage of grammar concepts	A	A	✓	53%	-
52	Understands the usage of grammar concepts	C	C	✓	53%	-
53	Knows correct spellings and phonics in words	B	C	X	25%	Word /s possibly confused
54	Knows correct spellings and phonics in words	A	A	✓	34%	-
55	Knows correct spellings and phonics in words	C	A	X	29%	Spelling error in sentence undetected
56	Knows punctuation and sentence formation	B	D	X	19%	Error in Sentence misunderstood
57	Knows punctuation and sentence formation	C	C	✓	46%	-
58	Understands idioms, proverbs and figures of speech	D	A	X	40%	Proverbs not understood
59	Identifies synonyms, antonyms and other words	A	A	✓	30%	-
60	Infers using contextual clues and prior knowledge	B	C	X	49%	Inference based on facts incorrect

# MATHS SCORE CARD



Student Name (6B)

**Score: 14/40    Percentile: 30.6    Test taken in: Summer 2010**

Q	Skill Tested	1	2	3	4	Error Indicated
1	Geometry: concepts and applications	B	<b>B</b>	✓	66%	-
2	Arithmetic operations: four basic operations, properties	B	<b>C</b>	x	49%	Multiplication facts involving zero not clear
3	Pre-algebra and algebra skills	A	<b>B</b>	x	55%	Inadequate algebraic skills
4	Area and perimeter: concepts and computations	A	<b>D</b>	x	47%	Concept of perimeter not understood
5	Fractions and decimals: concepts, use and conversions	A	<b>D</b>	x	56%	Improper fractions not understood
6	Geometry: concepts and applications	B	<b>C</b>	x	44%	Unable to identify a right angle
7	Measurement and data interpretation	B	<b>D</b>	x	50%	Not clear of conversions of units of time
8	Factors and multiples	C	<b>D</b>	x	44%	Concept of common multiples not understood
9	Fractions and decimals: concepts, use and conversions	A	<b>A</b>	✓	46%	-
10	Pre-algebra and algebra skills	C	<b>C</b>	✓	50%	-
11	Area and perimeter: concepts and computations	A	<b>D</b>	x	39%	Unable to conserve area
12	Number sense, related concepts and basic number competency	B	<b>B</b>	✓	61%	-
13	Geometry: concepts and applications	A	<b>A</b>	✓	59%	-
14	Fractions and decimals: concepts, use and conversions	A	<b>C</b>	x	23%	Unable to compare fractions
15	Pre-algebra and algebra skills	A	<b>A</b>	✓	54%	-
16	Area and perimeter: concepts and computations	A	<b>D</b>	x	38%	Concept of area not understood
17	Measurement and data interpretation	B	<b>A</b>	x	49%	Insufficient understanding of units of length
18	Area and perimeter: concepts and computations	B	<b>C</b>	x	22%	Confusion between area and perimeter
19	Applications in daily life: word/visual problems	B	<b>B</b>	✓	33%	-
20	Factors and multiples	B	<b>B</b>	✓	40%	-
21	Fractions and decimals: concepts, use and conversions	A	<b>A</b>	✓	61%	-
22	Geometry: concepts and applications	D	<b>B</b>	x	46%	Inadequate spatial reasoning
23	Pre-algebra and algebra skills	B	<b>C</b>	x	56%	Inadequate algebraic reasoning
24	Pre-algebra and algebra skills	B	<b>B</b>	✓	75%	-
25	Arithmetic operations: four basic operations, properties	B	<b>B</b>	✓	53%	-
26	Arithmetic operations: four basic operations, properties	A	<b>C</b>	x	21%	Order of operations not understood
27	Measurement and data interpretation	C	<b>A</b>	x	56%	Scale of pictograph not understood
28	Measurement and data interpretation	B	<b>D</b>	x	34%	Question not understood correctly
29	Number sense, related concepts and basic number competency	B	<b>D</b>	x	28%	Inadequate number sense
30	Arithmetic operations: four basic operations, properties	B	<b>B</b>	✓	30%	-
31	Applications in daily life: word/visual problems	A	<b>A</b>	✓	63%	-
32	Number sense, related concepts and basic number competency	B	<b>B</b>	✓	37%	-
33	Applications in daily life: word/visual problems	B	<b>C</b>	x	55%	Unable to reason out proportionately
34	Fractions and decimals: concepts, use and conversions	B	<b>C</b>	x	38%	Equivalent fractions not understood
35	Problem solving: advanced or challenging problems	D	<b>C</b>	x	28%	Pattern not analysed correctly
36	Factors and multiples	A	<b>C</b>	x	37%	Divisibility not understood
37	Applications in daily life: word/visual problems	C	<b>B</b>	x	31%	Problem not analysed correctly
38	Geometry: concepts and applications	C	<b>A</b>	x	56%	Inadequate spatial reasoning
39	Problem solving: advanced or challenging problems	B	<b>C</b>	x	39%	Problem not analysed correctly
40	Problem solving: advanced or challenging problems	C	<b>B</b>	x	22%	Problem not analysed correctly



## SCIENCE SCORE CARD

Student Name (6B)

**Score: 23/45      Percentile: 53.7      Test taken in: Summer 2010**

Q	Skill Tested	1	2	3	4	Error Indicated
1	Recollection or recognition of science facts and concepts	C	<b>C</b>	✓	78%	-
2	Definition or description of scientific terms, organisms or materials	C	<b>A</b>	✗	27%	Inadequate application of practical knowledge
3	Representing, relating or explaining scientific processes or observed phenomena	B	<b>B</b>	✓	46%	-
4	Representing, relating or explaining scientific processes or observed phenomena	A	<b>A</b>	✓	85%	-
5	Classification/comparison of organisms/processes; giving examples	D	<b>A</b>	✗	37%	Inadequate understanding of the concept
6	Representing, relating or explaining scientific processes or observed phenomena	C	<b>C</b>	✓	72%	-
7	Definition or description of scientific terms, organisms or materials	B	<b>B</b>	✓	72%	-
8	Knowledge of use of scientific instruments, tools and procedures	A	<b>C</b>	✗	33%	Inadequate understanding of the concept
9	Knowledge of use of scientific instruments, tools and procedures	C	<b>A</b>	✗	52%	Inadequate knowledge of instruments
10	Recollection or recognition of science facts and concepts	C	<b>C</b>	✓	36%	-
11	Definition or description of scientific terms, organisms or materials	B	<b>D</b>	✗	35%	Inadequate knowledge of material properties
12	Recollection or recognition of science facts and concepts	D	<b>D</b>	✓	41%	-
13	Knowledge of use of scientific instruments, tools and procedures	A	<b>A</b>	✓	77%	-
14	Recollection or recognition of science facts and concepts	D	<b>B</b>	✗	10%	Inadequate knowledge of seeds
15	Definition or description of scientific terms, organisms or materials	B	<b>B</b>	✓	67%	-
16	Recollection or recognition of science facts and concepts	D	<b>C</b>	✗	44%	Error in visual interpretation
17	Classification/comparison of organisms/processes; giving examples	C	<b>C</b>	✓	60%	-
18	Knowledge of use of scientific instruments, tools and procedures	D	<b>C</b>	✗	58%	Error in identifying relevant information
19	Classification/comparison of organisms/processes; giving examples	C	<b>B</b>	✗	31%	Error in identifying patterns in classification
20	Extraction, translation and application of knowledge or information	A	<b>A</b>	✓	39%	-
21	Representing, relating or explaining scientific processes or observed phenomena	B	<b>B</b>	✓	64%	-
22	Extraction, translation and application of knowledge or information	B	<b>B</b>	✓	82%	-
23	Classification/comparison of organisms/processes; giving examples	C	<b>D</b>	✗	67%	Error in identifying cause effect relationship
24	Knowledge of use of scientific instruments, tools and procedures	D	<b>D</b>	✓	87%	-
25	Analysis of information to identify trends or properties	B	<b>D</b>	✗	35%	Error in visual interpretation
26	Representing, relating or explaining scientific processes or observed phenomena	C	<b>D</b>	✗	52%	Inadequate understanding of material properties
27	Classification/comparison of organisms/processes; giving examples	C	<b>B</b>	✗	53%	Error in identifying patterns in classification
28	Extraction, translation and application of knowledge or information	B	<b>B</b>	✓	46%	-
29	Advanced or complex data representation or interpretation	B	<b>C</b>	✗	56%	Error in interpreting graphs
30	Integrating different concepts or information for decision making	D	<b>D</b>	✓	51%	-
31	Integrating different concepts or information for decision making	A	*	✓	100%	(Question dropped - all given credit)
32	Hypothesis formulation; design of apparatus or experiment	C	<b>D</b>	✗	42%	Possible guess work
33	Analysis of information to identify trends or properties	B	<b>B</b>	✓	37%	-
34	Integrating different concepts or information for decision making	D	<b>B</b>	✗	35%	Error in relating visual data
35	Hypothesis formulation; design of apparatus or experiment	A	<b>D</b>	✗	55%	Inadequate knowledge of scientific processes
36	Advanced or complex data representation or interpretation	A	<b>D</b>	✗	24%	Error in interpreting information
37	Advanced or complex data representation or interpretation	A	<b>A</b>	✓	34%	-
38	Advanced or complex data representation or interpretation	A	<b>A</b>	✓	40%	-
39	Hypothesis formulation; design of apparatus or experiment	A	<b>A</b>	✓	17%	-
40	Hypothesis formulation; design of apparatus or experiment	C	<b>A</b>	✗	51%	Inadequate knowledge of scientific procedures
41	Analysis of information to identify trends or properties	B	<b>C</b>	✗	54%	Error in identifying cause effect relationship
42	Integrating different concepts or information for decision making	B	<b>C</b>	✗	34%	Error in identifying cause effect relationship
43	Integrating different concepts or information for decision making	A	<b>A</b>	✓	47%	-
44	Analysis of information to identify trends or properties	B	<b>C</b>	✗	31%	Error in drawing inference from data
45	Extraction, translation and application of knowledge or information	B	<b>B</b>	✓	32%	-



## PRACTICE QUESTIONS



***This section has been specially designed for you to practise your low-performing skills.***

So, you have received your ASSET results. You have seen the scores, gone through the analysis, checked your answers with the given correct answers and understood your strengths and weaknesses.

Now, your question is: How can I improve, given my strengths and weaknesses?

These practice questions have been designed to help you do exactly that. For every subject, we have picked your low-performing skills and provided practice questions with answers and explanations to help you do better next time.\*

Try these out - discuss with your parents, teachers or friends if you need to. Answers and explanations are given at the end, but check them only after you have tried your best to answer on your own!

You can also write to us at [info@ei-india.com](mailto:info@ei-india.com) and we'll help you out.

Good luck!

Regards,

The ASSET Team

\*In English, if any reading comprehension skill is weak, an entire passage is provided for practice. In Hindi, only non-reading comprehension skills have been provided for practice.

Note: Due to technical limitations, image quality may not be uniform and some images may appear slightly unclear. This is not an error.

# ENGLISH

**Skill: Identifies facts and makes important connections in comprehending a passage.**

By reading a passage carefully, we will be able to identify facts that are clearly stated, sequence them correctly and deeply understand different events, characters and their feelings. We will also be able to use clues in the form of knowledge, words and expressions that we already know to connect important ideas and arrive at the correct answers.

## "A Rajput Boy"

*Pratap, a Rajput boy, lived with his parents in Jodhpur, Rajasthan. Riding on his white pony outside the town one day, he saw a rainbow in the sky, and wandered off in search of the pot of gold believed to be at its other end. He ended up getting lost in the desert.*

Now read on ...

He got off his pony and made a big pile of rocks and stones. 'Now I shall know if I'm going round and round in a ring,' he said and rode off.

Some time later, he saw the pile of stones in front of him!

Pratap looked at the sun. It was midday and the sun was almost overhead. Which way was it moving? He knew Jodhpur was on the east side of the desert.

"I'll see which way the sun moves," he said, "and then I'll go the other way. That will take me to Jodhpur."

He watched the moving shadow cast by the pile of stones. "That's the way I must go," said Pratap and pointed to the east.

He set off but all along the way, he stopped now and then and made piles of stones at regular intervals. Whenever he looked back, he saw the piles of stones stretching in a line across the desert behind him, and it ensured he would not get lost.

When he reached home, his parents were overjoyed to see their lost child. They admired his cleverness in making piles of stones to keep himself on track.

Pratap sipped some water very slowly, - water was very scarce in their region - had some supper and went to bed. He dreamed that he found the pot of gold at the foot of the rainbow. But the pot contained something more precious than gold. It contained water - lots and lots of lovely, cold water.

1. From the events in the story, the reader can say that the child used his \_\_\_\_\_ to reach home.
  - A. common sense and alertness
  - B. understanding and strength
  - C. memory and parents' advice
  - D. money and helpful nature

---

2. This story would most probably be found in a book of
  - A. Tales of Kings.
  - B. Magical Tales.
  - C. Science Fiction.
  - D. Children's Stories.

---

3. Where was the child headed in the beginning of the story?
  - A. to a desert
  - B. to the city
  - C. in search of a rainbow
  - D. in search of gold

4. Which of these questions is answered in the paragraph: "He set off ..... get lost"

- A. How did Pratap make sure he would not get lost?
- B. From where did Pratap get all the stones?
- C. How did Pratap pass his time the whole day?
- D. How did Pratap know that Jodhpur was to his east?

5. The author ends the story with words that

- A. encourage action.
- B. denote sadness.
- C. stir the imagination.
- D. cause disappointment.

6. Why did Pratap look at the sun when he saw the pile of stones he had made in front of him?

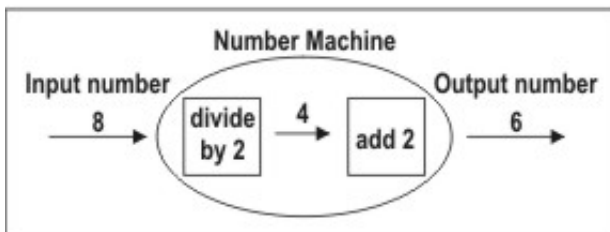
- A. He wanted to estimate the time of the day.
- B. It was getting hot and he was tired from walking.
- C. He wanted to know which direction was East.
- D. He wanted to check if the clouds had cleared.

## MATHS

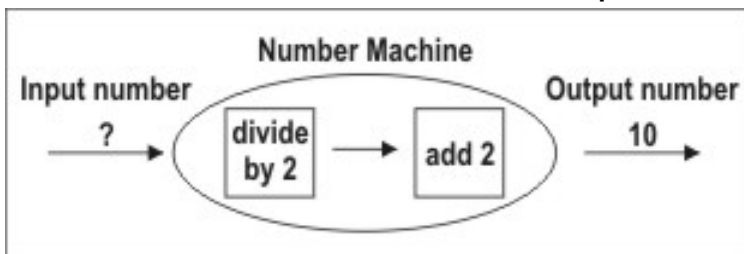
### Skill: Problem solving: advanced or challenging problems

This skill tests the ability to solve unfamiliar or challenging problems. These problems may require applying different concepts learned, integrating them in a problem and devising a systematic method of reasoning and solving.

7. A number machine takes a number (input number), performs some operations on it and returns a new number (output number). For example the number machine shown below- 1. takes 8 as the INPUT NUMBER 2. divides by 2 3. adds 2 to the resulting number 4. gives 6 as the OUTPUT NUMBER

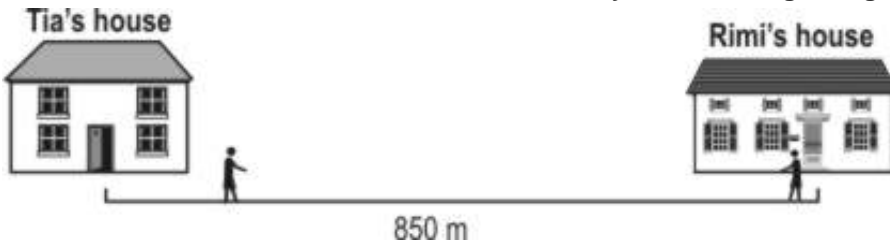


What would be the INPUT NUMBER if the output number is 10?



- A. 4
- B. 6
- C. 16
- D. 22

8. Tia's house and Rimi's house are connected by a 850 m long straight road.



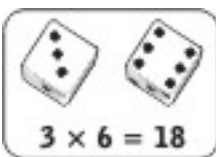
One day, Tia starts walking from her house towards Rimi's. When she had walked 150 m, Rimi starts walking from her house towards Tia's. If they walk at the same speed, how far will they be from Rimi's house when they meet?

- A. 700 m  
B. 425 m  
C. 350 m  
D. 150 m
- 
9. Look at this poster from a shop.



If Manoj got Rs. 200 off on his bill at this shop, what might have been the total bill amount before the discount?

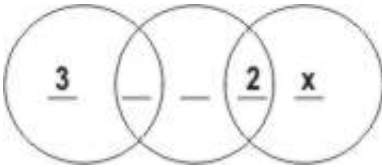
- A. Rs. 1700  
B. Rs. 2300  
C. Rs. 2600  
D. Rs. 3000
- 
10. Neeti and Charisma are playing a game. Each one has a cube with numbers written on each side. Both of them throw their cubes and find the product of the two numbers that they get on the two cubes.



So, for example, if the two numbers that come up are 3 and 6, the product will be 18. After each turn, they score points as per the rules they have made: - If the product is ODD, Neeti gets 5 points. - If the product is EVEN, Charisma gets 5 points. In which of the following cases can Neeti score 5 points?

- A. when one of them gets an odd number and the other gets an even number  
B. only when Charisma gets an even number  
C. only when she gets an even number  
D. when both of them get an odd number
- 
11. Shown below are 4 'words' that follow a certain rule in letters and numbers. AB347 KL189 EF459 XY235  
Which word below follows the same rule?
- A. FG125  
B. PO279  
C. PQ279  
D. TS458

12. The numbers 1, 2, 3, 4 and 5 have to be put into the spaces in the circles below so that the sum of the numbers inside EACH circle is the same. Two of the numbers are already filled in.



Which number goes into the space marked 'x'?

- A. 1  
B. 4  
C. 5  
D. we can't say
- 
13. Some workers were decorating the entrance of an exhibition with coloured balloons. They were putting balloons in the following pattern: 2 Red balloons, 3 Blue balloons, 2 Pink balloons, 3 Yellow balloons then again 2 Red balloons, 3 Blue balloons, 2 Pink balloons, 3 Yellow balloons and so on. What would be colour of the 26<sup>th</sup> balloon in the pattern?



- A. Red  
B. Blue  
C. Pink  
D. Yellow
- 
14. I am a 2-digit odd number.

The product of my digits is 36.

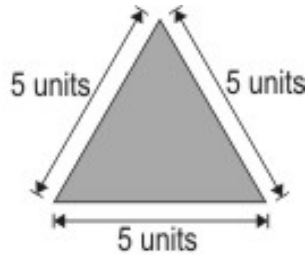
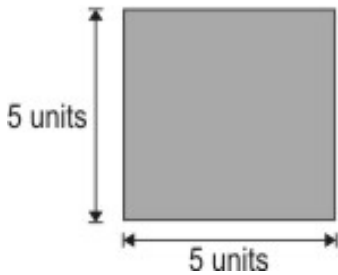
What is my last digit?

- A. 1  
B. 3  
C. 7  
D. 9

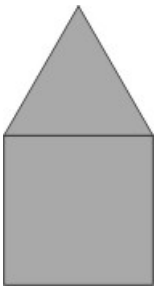
**Skill: Area and perimeter: concepts and computations**

This skill involves understanding the concepts of area and perimeter and the ability to calculate these for different shapes, and how they change with the shape.

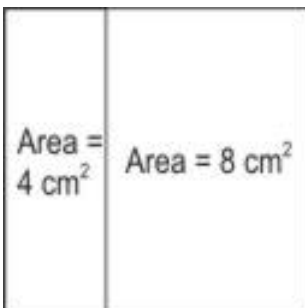
15. Each side of the square and the triangle shown below is 5 units long.



They are arranged to form the shape shown below. What is the perimeter of the shape?



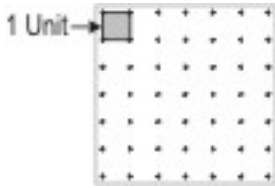
- A. 20 cm
  - B. 25 cm
  - C. 30 cm
  - D. 35 cm
- 
16. Two smaller rectangles of areas  $4 \text{ cm}^2$  and  $8 \text{ cm}^2$  are joined along one of their sides to form a bigger rectangle as shown in the figure below.



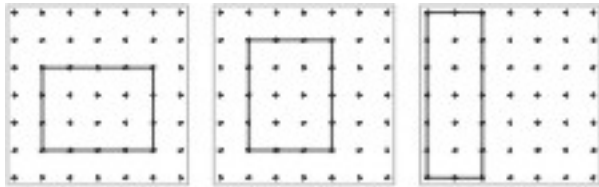
What is the area of the bigger rectangle so formed?

- A.  $2 \text{ cm}^2$
- B.  $4 \text{ cm}^2$
- C.  $12 \text{ cm}^2$
- D.  $32 \text{ cm}^2$

17. Each one of Aloka, Mitisha and Foram are given a white dotted paper. They can draw various shapes on it using those dots and find out their area. For example, a square drawn as shown below will have area equal to 1 square unit.



They have drawn rectangles as shown below.



Aloka

Foram

Mitisha

Whose rectangle covers the maximum area?

- A. Aloka's
  - B. Foram's
  - C. Mitisha's
  - D. All the rectangles cover the same area.
- 
18. Shaheen has many triangular pieces, each of area 1 sq unit and many rectangular pieces, each of area 2 sq unit.

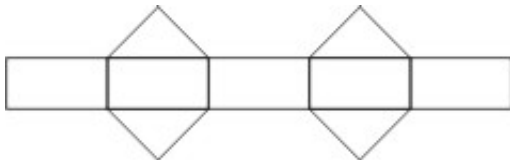


area = 1 sq unit

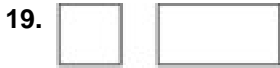


area = 2 sq unit

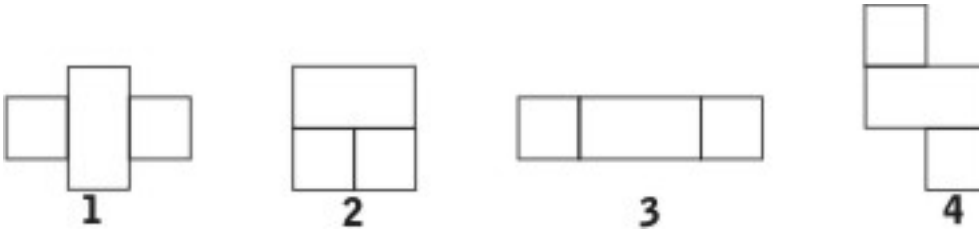
If she arranges these to form a shape as shown below, what would be the area of this shape?



- A. 9 sq unit
- B. 13 sq unit
- C. 14 sq unit
- D. 18 sq unit



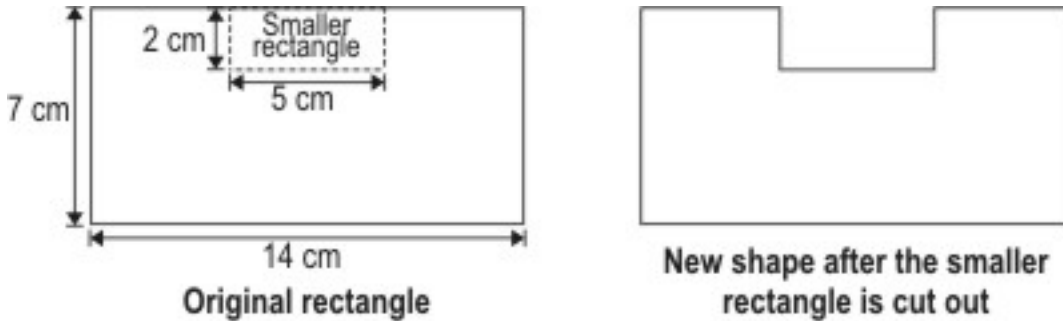
Two tiles are shown here, one big and one small. 1 big tile and 2 small tiles are joined in different ways not overlapping each other as shown here.



Which of them have the same area?

- A. Only 1 and 2
- B. Only 3 and 4
- C. All of them have the same area.
- D. All of them have different areas.

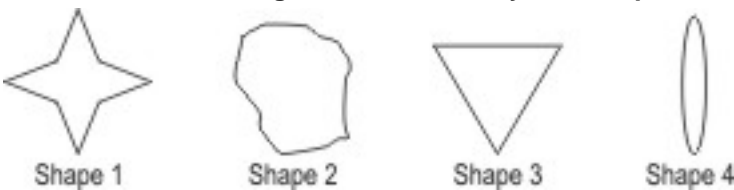
20. A rectangle of sides 5 cm and 2 cm is cut out from a bigger rectangle of sides 14 cm and 7 cm to form a new shape as shown below.



What is the perimeter of the shape formed ?

- A. 46
- B. 40
- C. 22
- D. 20

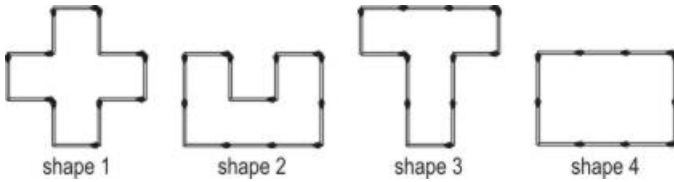
21. Perimeter is the length of the boundary of a shape. Which of these shapes would have a perimeter?



- A. shape 3 only
- B. shapes 1 and 3 only
- C. shapes 2 and 4 only
- D. all the shapes



22. Manasvi has some identical matchsticks. She made 4 different shapes using them.



Which shape has the **MAXIMUM** area?

- A. shape 1
- B. shape 2
- C. shape 3
- D. shape 4

## SCIENCE

**Skill: Classification/comparison of organisms/processes; giving examples**

Once we know what the basic characteristics of substances or organisms or processes are, we should be able to group or classify them according to their similarities or differences. The skill of classification is important and is often an essential step in many scientific investigations.

23. Shown here are some coins.



Which of these properties can be used to classify the coins into different groups?

1. size
2. value
3. thickness

- A. 1 only
- B. 2 only
- C. 3 only
- D. either 1, 2 or 3

24. The properties of a few substances are given in the table shown below:

	Dissolves in water	Solid	Has a strong smell
Rock salt	Yes	Yes	No
Vinegar	Yes	No	Yes
Paraffin	No	Yes	No
Coconut oil	No	No	Yes

Answer the following question based on this table. For a substance marked 'X' he filled in the table as shown below -

	Dissolves in water	Solid	Has a strong smell
X	No	Yes	Yes

Which of the following could 'X' be?

- A. pepper
- B. petrol
- C. iron
- D. salt

25. 

<b>Opaque</b>	<b>Transparent</b>	<b>Soluble in water</b>	<b>Sinks in water</b>
---------------	--------------------	-------------------------	-----------------------

Mona was asked to name an example for each of the above mentioned categories. Here is what she found out.

Opaque	Transparent	Soluble in water	Sinks in water
Copper	Mirror	Sugar	A glass bottle completely filled with water

Which of her examples is **WRONG**?

- A. Copper, because light does pass through it.
- B. Mirror, because light cannot pass through it.
- C. Sugar, because it does not dissolve in water.
- D. A glass bottle completely filled with water, because it will not sink in water.

26. Gitanjali and Rabindra are playing a game. Gitanjali has to find out what Rabindra is thinking about by asking questions. Gitanjali: Is it an animal? Rabindra: YES Gitanjali: Does it have bones? Rabindra: NO Gitanjali: Does it have external ears? Rabindra: NO Gitanjali: Can it fly? Rabindra: YES

Which of these could be Rabindra's guess?

- A. bat
- B. worm
- C. snake
- D. mosquito

27. Living things are classified into major groups like 'plants' or 'animals'. These major groups are classified into smaller groups based on the similarities between them. Which of the following statements about classification of some living things is true?

- A. A fly is an insect, and also a bird.
- B. A fly is an insect, but not an animal.
- C. A pigeon is a bird, and also an insect.
- D. A pigeon is a bird, and also an animal.

28. Solid, liquid and gas are the three states of matter. The state of which of the following substances is the same as that of chalk? 1. talcum powder 2. wooden cube 3. water
- A. only 1
  - B. only 3
  - C. only 1 and 2
  - D. all - 1, 2 and 3

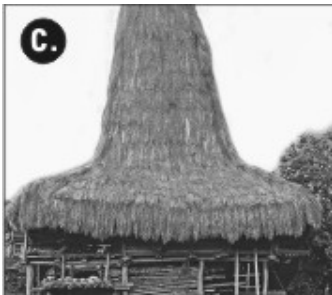
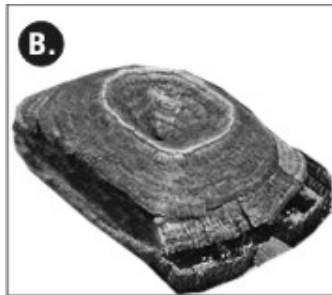
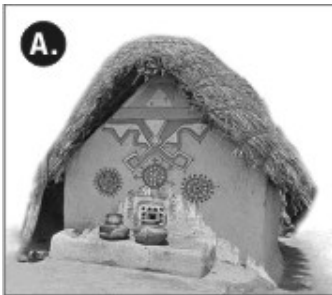
29. Ruthik throws a ball up in the air and after a point, the ball falls back to the Earth. The ball falls back due to the same reason as -
- A. why the blades of a fan rotate
  - B. why water drips down from a tap
  - C. why a magnet attracts a piece of iron
  - D. why an arrow leaves the string of a bow

30. Which of these CANNOT exist in a solid form?
- A. Wax, because it melts easily on being heated.
  - B. Water, because it is always found in liquid form.
  - C. Salt, because its shape changes depending on the container it is put in.
  - D. All of the above can exist in a solid form.

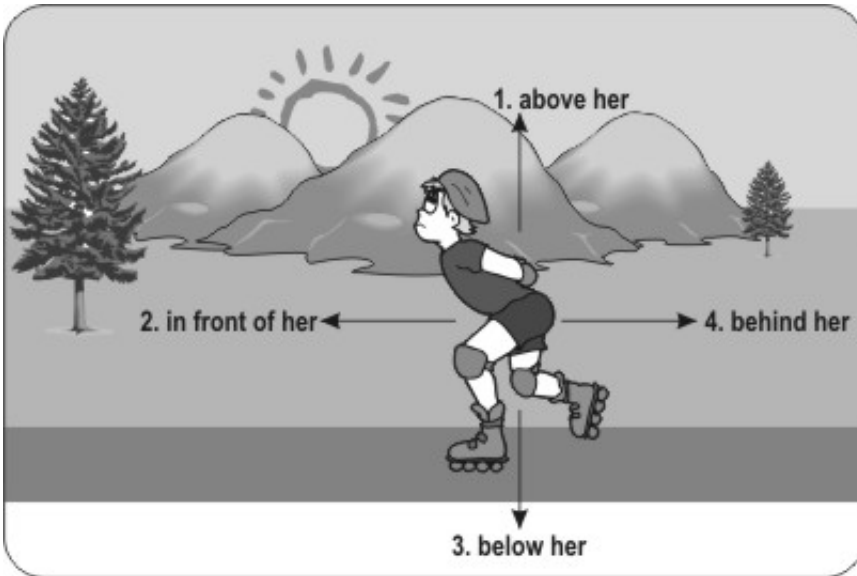
**Skill: Analysis of information to identify trends or properties**

Information is presented to us in various forms - images, graphs, tables and even text. It is possible that there are certain patterns in the data and based on those patterns, we can identify some general property that might exist or something common between different pieces of information.

31. In the Casamance region of Senegal, Africa, the village set-up is very interesting. In their villages, even when wells are dug, the water is salty. To solve this problem and to get good water for drinking, the house in the center of the village collects rainwater inside the home to use as drinking water. Which of these could be one such house?



32. Vandana is standing as shown below.



There are arrows pointing above, in front of, below and behind her. Which arrow could be pointing to the North?

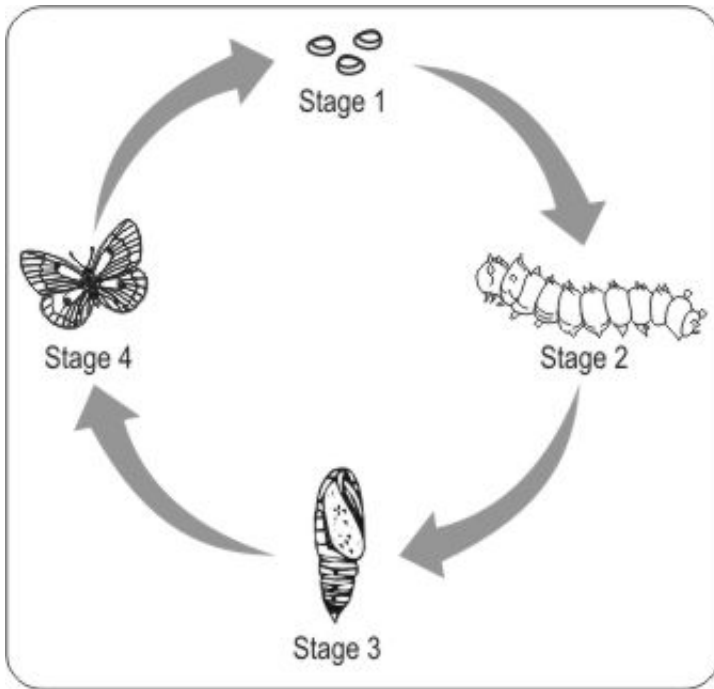
- A. only 1
- B. only 2
- C. only 1 or 3
- D. only 2 or 4

33. Rice plants need to stand in a lot of water for growth. The borders (bunds) of a rice field have to be strong to hold the water. A farmer planted some grass on the borders. What could be the reason for this?

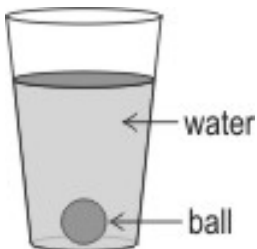


- A. Grass also needs a lot of water to grow; so planting them on the bunds saves water.
- B. Grass adds vital nutrients to the soil which are required for the rice plants to grow.
- C. Grass has fibrous roots which bind the soil of the bund and hold it together.
- D. Grass creates a barrier above the bund to prevent water from flowing beyond.

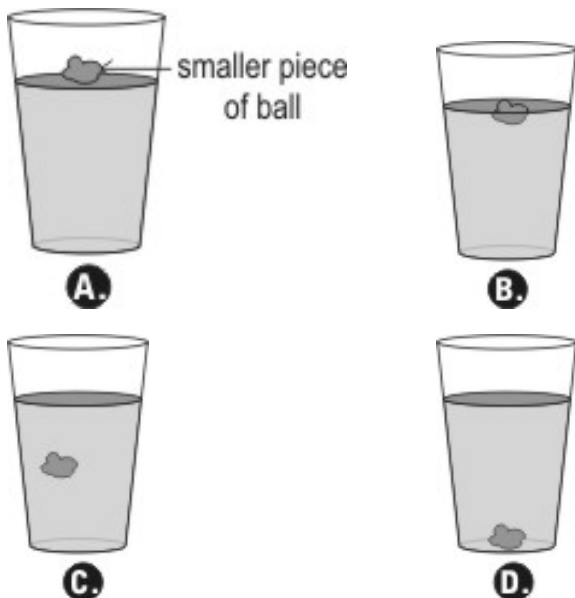
34. From the picture of the life cycle of a butterfly given below, in which stage do you think the wings and legs of a butterfly develop?



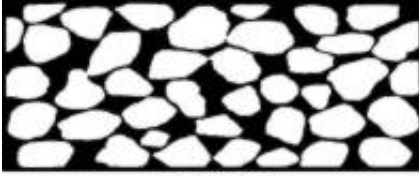
- A. in stage 2  
B. between stages 3 and 4  
C. in stage 4  
D. between stages 2 and 3
- 
35. A solid ball sinks to the bottom when placed in a glass of water as shown below.



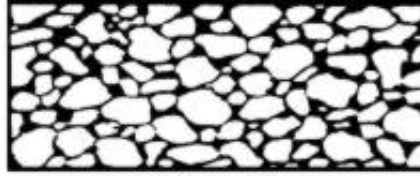
The ball is taken out and a small piece is cut off from it. If this smaller piece is put into water, what will it look like after some time?



36. Clayey soil is suitable for the cultivation of paddy as it can hold water and does not allow it to drain away quickly.



Sandy soil



Clayey soil

The grains in the clayey soil hold more water than those in sandy soil because

- A. they are heavier, so the water has to push harder.
  - B. they are darker in colour, so they can hold more water.
  - C. they have more air spaces between them, so water flows through freely.
  - D. they are smaller and closely packed, so there is less space for water to flow.
- 
37. When you place wet hands on a glass table, the water that gets stamped on it is not seen after sometime. This happens because of a certain process. In which of these examples below, is the SAME PROCESS involved?
- A. drying of the hair using a dryer
  - B. disappearance of salt after stirring in water
  - C. formation of water droplets on a glass full of cold water
  - D. a sponge piece absorbing water when kept on a puddle of water
- 
38. Brinda found that her bottle of water had tiny droplets of water outside the bottle. Which of these would she have done just BEFORE she found this?
- A. took the bottle lying outside and kept it in the fridge
  - B. took the bottle out from the fridge and kept it on a table
  - C. took the bottle from hot sunlight and kept it in the fridge
  - D. took the bottle lying on a window and kept it in hot sunlight

# ANSWERS AND EXPLANATIONS

## English

**Skill: Identifies facts and makes important connections in comprehending a passage.**

1. A: The child knew that the overhead sun meant it was noon time. His house was in Jodhpur and he knew where it was located. He waited for some time to see in which direction the sun would cast a shadow of the stones he had piled up. The moment he saw the sun's movement towards the west, he went the other way. He tracked the shadow with different piles of stones to make sure he was on the right track till he reached home. In this way he used his common sense and alertness to reach home without anyone's help and without giving up. Though B ( understanding and strength) is partially correct, it was not understanding and strength alone that helped him.
2. D: Children's Stories deal with different things that children do to help themselves and be happy. All the details of the story, " A Rajput Boy ", tell us about a child and his experiences, about how the child went in search of gold, got lost and how he found a way to return home, all by himself. So it is very likely to be in a book of " Children's Stories ". It cannot be in a book of " Magical Tales " (Option B ) as the story does not show anything magical that took place but presents events that really took place.
3. D: The words " wandered off " shows that he was going somewhere. If we ask the question, "where was he going", we can get the answer, " in search of gold in a pot ". The sentence, " He ended up getting lost in the desert ." shows that he had not planned to go to the desert but just blindly followed the rainbow to collect the pot of gold at the end of the rainbow. When he could not find the gold, he found himself in a place which was the desert. So A is wrong.
4. A: If we wish to answer the question in Option - A, we will have to explain how Pratap cleverly used "the piles of stones" he had arranged as sign posts. The last part of the second sentence which completes this paragraph: "... .. and it ensured he would not get lost ", gives us a very clear hint as to what the correct option (Question) should be. The proper answer to the question in Option- D is how Pratap was able to understand which way to go home, once he looked at the sun. The paragraph: "He set off ..... get lost" in the passage does NOT give us the required information to answer the question in Option- D. So D is incorrect.
5. C: Water is something that we use every day of our life. The last paragraph mentions the words, " something more precious than gold " and " lovely, cold water ", which makes us wonder what that could be and how ordinary water could appear and feel lovely. A (encourage action) does not really fit well with the emotions at the end of the story.
6. C: Pratap wanted to know which way the sun was moving to figure out which direction was East. We can understand this if we try answering WHY Pratap was interested in the following question from the passage: "Which way was it moving?" The passage also clearly says that Pratap "knew Jodhpur was on the east side of the desert" and so he wanted to locate the East. Option - A is NOT the correct answer as he was only interested in knowing in which direction the East was after he realised that he was "going round and round in a ring". It so happened that the time of the day " was midday and the sun was almost overhead" when Pratap looked up at the sun .

## Maths

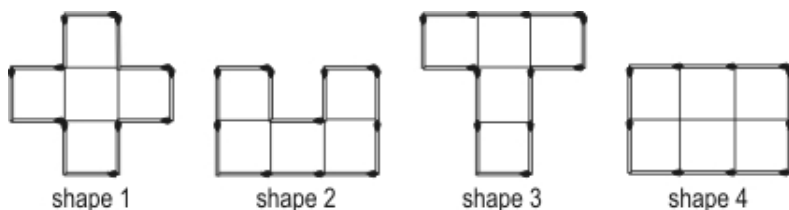
**Skill: Problem solving: advanced or challenging problems**

7. C: The number machine takes a number divides it by 2, adds 2 and gives 10. So working back, the machine would have added 2 to  $8(10 - 2)$  to get 10. Now what number should it have started with to get 8 when divided by 2?  $16 \div (8 \times 2)$
8. C: Tia has walked 150 m of the total distance of 850 m. She needs to walk 700 m ( $850 - 150$ ) more to reach Rimi's house, when Rimi starts walking. So Tia and Rimi are separated by a distance of 700 m when Rimi starts walking. Since they are walking at the same speed, they will meet after each of them covers half of this 700 m. That is they meet after Rimi has walked 350 m from her house.
9. C: According to the question, if a person spends Rs. 2000, his discount is calculated as Rs. 100 ( for the first Rs.1500) + Rs. 50 for the remaining Rs. 500. Manoj got a discount of Rs. 200. That is he would have got a discount of Rs.100 for the first Rs. 1500 spent and the remaining Rs.100 ( $2 \times 50$ ) for two 500 rupees spent. So he would have spent more than Rs. 2500. If he had spent Rs. 3000, it is Rs. 1500 ( $3 \times 500$ ) above the first Rs. 1500. So he would have got a discount of  $100 + 3 \times 50 =$  Rs. 250. So here, he would have spent between Rs. 2500 and Rs. 3000. So it could be Rs. 2600.
10. D: Neeti can score 5 points only when the product of the 2 numbers on the dice is odd. For the product of two numbers to be odd, both of them have to be odd.
11. C: Study the words carefully. Do you find anything common to all of them in the way the words are built? We see that the first 2 characters are letters and the last 3 are numbers. Is there anything special about the letters? Yes, they are consecutive letters of the alphabets. Are the numbers related in any way? Are you able to see that the third number is the sum of the first 2? Both these rules are satisfied only in option C. We have PQ, two consecutive alphabets and  $2 + 7 = 9$ .

12. C: There are 2 numbers in the first circle, 3 and the number in the intersection of the first 2 circles, let us call this  $y$ . There are 3 numbers in the middle circle and 2 numbers in the last circle. ( $2$  and  $x$ ) Since the sum of the numbers in all the 3 circles are the same, we should have  $3 + y = 2 + x$ . For this to happen  $x$  and  $y$  should be such that  $y$  is one less than  $x$ . Also, we are putting the numbers 1, 2, 3, 4 and 5 in these spaces and 2 and 3 have already been used. So the only possibility is that  $y = 4$  and  $x = 5$ . So that leaves 1 to be placed in the middle and the sum of the numbers in each of the circles are given by  $3 + 4$ ,  $4 + 1 + 2$ , and  $2 + 5$  respectively, all equal to 7.
13. C: The pattern of balloons is formed by repeating a certain block of balloons. Here the repeating block consists of 10 balloons as shown in the figure above. 2 such blocks would make 20 balloons and then the pattern starts again. So the 26<sup>th</sup> balloon would be the same as the 6<sup>th</sup> balloon of the repeating block, which is pink.
14. D: Given that the product of digits is 36. So the digits are factors of 36.  $1 \times 36 = 36$ .  $2 \times 18 = 36$ .  $3 \times 12 = 36$ . We cannot form two digit numbers with these factors as one of the factors is a two digit number. We also have  $4 \times 9 = 36$ . We can form the two digit odd number 49 using these 2 digits. The other possibility, 66 is even, so cannot be considered. So 49 is the only number that obeys the given rules. The last digit of 49 is 9.

### Skill: Area and perimeter: concepts and computations

15. B: The square has a perimeter of  $5 + 5 + 5 + 5 = 20$  units. When the new shape is formed by placing the triangle on the square, 2 additional sides of 5 units each are added and one side of the square and one side of the triangle are no longer on the boundary. So the boundary of the new shape is made of 3 sides of the square and 2 of the triangle, each 5 units long. So the perimeter is  $5 \times 5 = 25$  units.
16. C: When we join two smaller rectangles to form a larger one, the area covered by the larger rectangle is the sum of the areas of the 2 smaller rectangles. So the area of the larger rectangle here is  $8 + 4 = 12 \text{ cm}^2$ . When we have a rectangle whose length is 8 cm and breadth is 4 cm, we multiply  $8 \times 4$  to get the area. But that is NOT the case here. Here 8 and 4 are the areas of the smaller rectangles.
17. D: Let us see how many small squares of area = 1 square unit are there in each of these rectangles. This would be the area of each of these rectangles. Aloka's rectangle can be covered with 3 rows of such small squares with 4 squares in a row. So the area is  $4 \times 3 = 12$  square units. Foram's rectangle can be covered with 4 rows, each having 3 squares and so the area is again 12 square units. Mitisha's rectangle can be covered with 6 rows, having 2 squares each and again the area is 12 square units. So all 3 rectangles have the same area.
18. C: The given shape is made of 5 rectangles and 4 triangles. The area of the shape is the sum of the area of these individual shapes. The area of each rectangle is 2 square units, so the area of 5 such rectangles is  $5 \times 2 = 10$  square units. The area of each triangle is 1 square unit. So the area of 4 such triangles is 4 square units. So the total area of the shape is  $10 + 4 = 14$  square units.
19. C: The area of ANY figure formed by arranging the 2 small tiles and the larger one is the sum of the areas of these tiles. In whichever way we choose to arrange them, this sum will remain the same. So the area of any figure formed by arranging these tiles will be equal, even though the figures look different.
20. A: The perimeter of the larger rectangle =  $7 + 14 + 7 + 14 = 42$  cm. Let us see how the boundary of the larger rectangle changes when we cut out the smaller rectangle. A portion of the boundary of the larger rectangle of length 5 cm is cut off when the smaller rectangle is cut out. To compensate for this decrease, another length of 5 cm is added to the boundary further down. Also two 2 cm lengths corresponding to the width of the smaller rectangle are also added to the boundary. So the total change is 4 cm added to the boundary of the larger rectangle. So The perimeter of the new shape is  $42 + 4 = 46$  cm.
21. D: Do each of these shapes have a boundary? Yes! You can see that they all have a boundary. Now we need to think about whether or not the boundary has a length. Imagine that you are making these shapes, let us say shape 2, using a string. Does it have a boundary? Yes, the string forms the boundary. Does the string forming the boundary have a length? Yes, you can just straighten it out and measure the length. So each of these shapes has a boundary, the boundary has a length and can be measured. So they all have a perimeter.
22. D: Let us take the length of a match stick to be unit length. So the area of a square formed by 4 such match sticks would be 1 square unit. Let us divide these shapes into unit squares as shown in the figure below, and count how many unit squares are there in each.



There are 5 squares each in shapes 1, 2 and 3 and 6 squares in shape 4. So shape 4 has the maximum area.



## Science

### Skill: Classification/comparison of organisms/processes; giving examples

23. D: One rupee, two rupee and five rupee coins are all of different sizes and thickness. They can be classified based on their size, shape, thickness etc. They can also be grouped based on their different currency values. Hence D is correct. Compare the thickness and size of a five rupee coin with a one rupee coin and you will observe that they are not the same. Hence B is incorrect.
24. A: Try dissolving some pepper in some water. You will see that it sinks to the bottom. Pepper is a solid and it has a strong smell. Be careful while smelling pepper powder, it can cause you to sneeze heavily! Iron does not have as strong a smell as pepper. It has a distinctive smell which you can smell if you put your nose very close to iron, but it is much weaker than pepper. Hence, option C is incorrect.
25. B: Light rays cannot pass through a mirror but are reflected from its surface, hence it is opaque and not transparent. It appears shiny because of reflection on its smooth surface which forms images. An empty glass bottle will float in water but if the same bottle is completely filled with water, it will sink. Hence D is incorrect.
26. D: Those living organisms which cannot make their own food and depend on others for food are called 'animals'. Bat, snake, insects like mosquitoes and worms are all animals. Some of them have bones, like bats and snakes while some do not, like all insects and worms. Such animals without bones do not have any external ears. Some animals with bones have external ears and are known as mammals, like the bat. Hence A is incorrect.
27. D: Generally, living things that produce their own food with the help of sunlight are called plants and those that are dependent on other living beings for food are called animals. A fly as well as a pigeon fall under the Animal group. However, flies are insects and pigeons are birds. Hence, option B is incorrect.
28. C: Substances in which the particles are tightly packed and have a definite shape and volume are solids like a piece of chalk, talcum powder and a wooden cube. While substances in which the particles are slightly loosely packed and have a definite volume but not a definite shape are liquids like water. Liquids like water can flow while solids like chalk cannot flow. Water does not have a definite shape while chalk has a definite shape. Hence B is incorrect.
29. B: The gravitational force of the Earth pulls all objects towards it like a ball thrown up or a drop of water present in the atmosphere or dripping from another object. That is why the ball and the drop of water both fall on the Earth's surface. The attraction of iron towards magnet is due to magnetic force and not due to gravitational force. Hence C is incorrect.
30. D: Wax is found in the solid form quite easily, like candles. Also, if we freeze water, it turns into ice, which is solid. Hence, options A and B are incorrect. Salt is a powder, but if we take a small grain of salt, we can see that it is a solid. Hence, option C is incorrect.

### Skill: Analysis of information to identify trends or properties

31. B: Look at the roofs of the houses shown in the options. Check them to see which house has a structure that can collect rainwater. Only option B has a depression that can be used to collect water. Options A and C have thatched roofs and option D has chimneys and a tiled sloping roof which do not help in collecting water, so they are not correct.
32. D: Imagine you are standing next to Vandana. You can see the Sun either rising or setting to your right. That means it is either East or West to your right. Where will North be? In that position, North could be either to your front or your back. Only arrows 2 and 4 in the figure cover these possibilities and hence, option D is the only correct answer. The North direction can never be towards the sky!
33. C: Look at the bunds shown in the image. They are much higher than the water level. This means that the grass does not play any role in directly stopping the flow of water beyond the bund. The grass provides additional strength to the bund by keeping the structure of the bunds held together with the help of its fibrous roots. Hence, option D is incorrect. Options A and B are false, and hence, incorrect.
34. B: Look at the chart. By the time the butterfly reaches stage 4, it has already developed wings and legs. It does not have wings or legs by stage 3. This means that it develops wings and legs between stages 3 and 4. Hence, option B is the only correct answer.
35. D: If you take a solid rubber ball that sinks in water and cut out a small piece from it in such a way that the shape is NOT like a cup, it will also sink in water. Basically, any substance that sinks in water will sink unless its shape allows it to hold some air within it. That is why ships can float in water. Their shape allows them to hold air. If you were to make all the metal of a ship into a solid ball, with no air spaces, it would sink straight to the bottom!
36. D: If there is less space between the soil particles, less water will be able to flow away through it. This means that more water will be held by such soil. Look at the figures of sandy and clayey soil. The sandy soil has more air spaces, whereas the clayey soil has less. Hence, option D is the correct answer.
37. A: When you press your wet hands on a glass table, some water gets left behind. Glass cannot absorb water, so the water gets converted to water vapour and mixes in the air. Salt dissolving in water or a piece of sponge absorbing water is not the same as drying, hence, options B and D are incorrect. The formation of water droplets on a cold glass occurs when water vapour is converted to liquid water, which is opposite to the process of drying. Hence, option C is incorrect.

38. B: Water droplets are often formed on the surfaces of cool objects when water vapour in the air condenses into liquid water. In the rainy season, when there is a lot of moisture or water vapour in the air, if you put a cool surface on a table in a room, it will be covered with water droplets very soon. When we do the opposite - keep a hot object in a cool place, then water vapour will not condense on the object, hence, option C is incorrect.

# **ASSET Relationship Enhancement Programme**

We have entered the 3rd year of partnering with schools with the 'Relationship Enhancement Programme'. The objective is to maximize the effective use of ASSET and its allied services that are aimed at helping children learn with understanding.

The focus of EI's support program for 2011-12 would be to assist teachers to develop Performance Assessment Tasks and use corresponding rubrics as a scoring guide. As Rubrics allow for standardized evaluation based on specified criteria, it makes assessments simpler and more transparent. It aims at accurate and fair assessment, fostering understanding and indicating the way to proceed with subsequent learning and teaching.

This integration of performance and feedback becomes the core of 'Formative Assessment'. In the new schools that have come into our fold the support focus would be around 'Remediation' thereby sowing the seeds for an "Improvement Plan" for the school.

## **ASSET<sup>EI</sup> Question - A - Day**

ASSET Question-a-day are thought provoking questions designed by team of educational experts at ASSET which aims at providing greater exposure to application orientated questions to students on daily basis. To get one such thought provoking question daily through mail register your email id.

**<http://www.ei-india.com/questionaday>**

## **ASSET AMBASSADOR<sup>EI</sup>**

A platform for students from across the country and abroad can share their views on various topics from school education, best practices, school activities, events, thoughts and ideas etc. We have around 1000+ ASSET Ambassadors from different schools of India and abroad. It is India's largest Social networking site for school student.

Join us

**<http://www.assetambassador.com>**

## **MINDSPARK<sup>EI</sup>**

Mindspark is a computer based adaptive self-learning system that allows the student to construct his/her own learning, at a pace he/she is comfortable with. Its available for classes 1 to 10 for Maths subject.

visit us

**<http://www.mindspark.in/>**

## **StopMugging StartLearning**

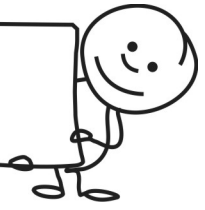
join us

**[www.facebook.com/StopMugging/StartLearning](http://www.facebook.com/StopMugging/StartLearning)**

'Customised feedback and analysis provided in MY BOOK helps us to work on our strengths and weaknesses. The surprise package was the Practice questions and explanations to tackle just those niggling weak areas. It was very thoughtful of you to provide such practice. Answering these questions would definitely help us improve in our weak areas. Thank you, ASSET, for making assessments enjoyable!'

**Class - 9 student**

**NOTES**



A series of 25 horizontal lines for writing notes, starting from the bottom edge of the 'NOTES' box and extending to the bottom of the page.



# NOTES

A series of horizontal lines providing a space for writing notes.