This sample test has 10 questions. Each question has 4 options: A, B, C, D

The skills assessed in IBT Reasoning require students to think critically, make logical deductions, identify connections and spot patterns. Students must demonstrate their ability to think outside the box and use their higher-order thinking skills to solve non-routine problems.

The IBT Reasoning test is split evenly between these 5 skill areas:

- Spatial Reasoning
- Verbal Reasoning
- Abstract Reasoning
- Numerical Reasoning
- Kinetic Reasoning
1. Which net forms the cube shown?

A

B

C

D

2. + + = ?

A

B

C

D
3. shop → shelves so kitchen → ?
A. scales  
B. cupboards  
C. stove  
D. table

4. Re-arrange the words to make a sentence.
many unusual faces see it is so happy to
Which word goes at the end of the sentence?
A. faces  
B. see  
C. so  
D. happy

5. Which picture completes the pattern?

A.  
B.  
C.  
D.  

Abstract Reasoning
6 Which picture is next in the sequence?

A B C D

7 Bike-Now rents out bikes for $2.00 plus $2.00 per hour. Cyclops rents out bikes for $2.50 per hour.

For a bike ride of how many hours would both companies charge the same money?

A 2 hours
B 3 hours
C 4 hours
D 5 hours

8 These 10 matchsticks make a 3 x 1 grid.

How many matchsticks are needed for a \( n \times 1 \) grid?

A \( n + 10 \)
B \( 3n + 1 \)
C \( 10 + 3n \)
D \( 4n \)
9 Rockets on this $6 \times 6$ grid can only travel left, right, forwards or backwards (not diagonally).

1 move = travel 1 square in any direction.

Black holes move a rocket instantly to the square indicated.

A rocket starts at S6. It makes the following set of moves:

What is the rocket's final position?

A  Q3
B  R3
C  S1
D  S3

10 Cog P rotates clockwise at 10 turns per minute.

How does Cog Q rotate?

A  clockwise at the same speed
B  clockwise at a slower speed
C  anticlockwise at the same speed
D  anticlockwise at a slower speed
<table>
<thead>
<tr>
<th>Question</th>
<th>Strand</th>
<th>Correct option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Spatial</td>
<td>A</td>
<td>If option A is rotated then folded, it becomes clearer</td>
</tr>
<tr>
<td>Q2</td>
<td>Spatial</td>
<td>A</td>
<td>The 3 pieces will fit together to form a rectangle.</td>
</tr>
<tr>
<td>Q3</td>
<td>Verbal</td>
<td>B</td>
<td>Shelves are for storage in a shop, cupboards are for storage in a kitchen.</td>
</tr>
<tr>
<td>Q4</td>
<td>Verbal</td>
<td>A</td>
<td>The rearranged sentence is: it is unusual to see so many happy faces.</td>
</tr>
<tr>
<td>Q5</td>
<td>Abstract</td>
<td>D</td>
<td>The relationship between the shapes on the RHS need to be copied on the LHS.</td>
</tr>
<tr>
<td>Q6</td>
<td>Abstract</td>
<td>A</td>
<td>The shaded triangle on outer edge rotates one quarter turn, the inner shaded triangle rotates half a turn.</td>
</tr>
<tr>
<td>Q7</td>
<td>Numerical</td>
<td>C</td>
<td>Both companies charge $10 for 4 hours.</td>
</tr>
<tr>
<td>Q8</td>
<td>Numerical</td>
<td>B</td>
<td>3 matchsticks are added for each new square.</td>
</tr>
<tr>
<td>Q9</td>
<td>Kinetic</td>
<td>C</td>
<td>The rocket travels through all 3 black holes to arrive at S1.</td>
</tr>
<tr>
<td>Q10</td>
<td>Kinetic</td>
<td>B</td>
<td>Cog Q rotates in the same direction as Cog P but at a slower speed because it has more teeth.</td>
</tr>
</tbody>
</table>

**Upper Years**
IBT

International Benchmark Tests