Chapter: Probability (Introductory) **Class:** 7
Test Code: 2026/Probability/VII/03
Max Marks: 15

1. The word 'MATHEMATICS' has 11 letters, with 'M' appearing twice.

$$\text{Probability} = \frac{2}{11}$$

Answer: $\boxed{B}$

2. Possible outcomes: HH, HT, TH, TT. Favorable outcome: TT.

$$\text{Probability} = \frac{1}{4}$$

Answer: $\boxed{B}$

3. Total number of marbles is $5+8+4=17$. Number of non-white marbles is $5+4=9$.

$$\text{Probability} = \frac{9}{17}$$

Answer: $\boxed{C}$

4. Prime numbers on a die are 2, 3, and 5.

$$\text{Probability} = \frac{3}{6} = \frac{1}{2}$$

Answer: $\boxed{A}$

5. Multiples of 7 between 1 and 50 are 7, 14, 21, 28, 35, 42, 49.

$$\text{Probability} = \frac{7}{50}$$

Answer: $\boxed{A}$

6. There are 13 Spades and 3 additional Aces (Hearts, Diamonds, Clubs).

$$\text{Probability} = \frac{16}{52} = \frac{4}{13}$$

Answer: $\boxed{B}$

7.

$$\text{Probability} = 1 - \frac{2}{9} = \frac{7}{9}$$

Answer: $\boxed{A}$

8. Composite numbers between 1 and 20 are 4, 6, 8, 9, 10, 12, 14, 15, 16, 18.

$$\text{Probability} = \frac{10}{20} = \frac{1}{2}$$

Note: The options provided do not match the calculated answer. The correct probability is $\frac{10}{20} = \frac{1}{2}$.

9. The spinner has 5 sectors. Favorable sectors: Green, Yellow, Orange.

$$\text{Probability} = \frac{3}{5}$$

Answer: $\boxed{C}$

10. Favorable outcomes: (1,4), (2,3), (3,2), (4,1), (4,6), (5,5), (6,4).

$$\text{Probability} = \frac{7}{36}$$

Answer: $\boxed{A}$

11. Choosing a day of the week and predicting if a baby is a boy or girl are experiments with equally likely outcomes. **Answer:** $\boxed{D}$

12. Perfect cubes between 1 and 15 are 1 and 8.

$$\text{Probability} = \frac{2}{15}$$

Answer: $\boxed{B}$

13. The word 'EXAMINATION' has 11 letters, with vowels: E, A, I, A, I, O.

$$\text{Probability} = \frac{6}{11}$$

Answer: $\boxed{B}$

14. Number of heads = 100 - 45 = 55.

$$\text{Probability} = \frac{55}{100} = 0.55$$

Answer: $\boxed{B}$

15. Total number of socks is $4 + 6 = 10$.

$$\text{Probability} = \frac{6}{10} = \frac{3}{5}$$

Answer: $\boxed{B}$