```
Activity 4.6.1: Basic Concepts of Probability
                                                                                                                                                                                                                                           Activity 4.6.1: Basic Concepts of Probability
                                                                 Total points = 13
                                                                                                                                                                                                                                                                                 Total points = 13
     A. Answers
                                                                                                                                                                                                                    A. Answers
         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
        2. S = \{HH, HT, TH, TT\}
                                                                                                                                                                                                                        2. S = \{HH, HT, TH, TT\}
         3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\}
                                                                                                                                                                                                                         3. S = {HHH, HHT, HTH, HTT, TTT, TTH, THT, THH} ✓
         4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                                                                                                                                                                                                                        4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                 Thursday, Friday, Saturday} ✓
                                                                                                                                                                                                                                  Thursday, Friday, Saturday} ✓
                                                                                                                                                                                                                    B. Answers
          1. A die and a coin
                                                                                                                                                                                                                         1. A die and a coin
                   1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\}
                                                                                                                                                                                                                                   1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\}
                   1.2 B = \{5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                                   1.2 B = \{5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                                   1.3 C = \{1T, 3T, 5T\}
1.4 D = \{1H, 2H\} \checkmark
                   1.3 C = \{1T, 3T, 5T\}
                  1.4 D = \{1H, 2H\}
                   1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
                                                                                                                                                                                                                                   1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
         2. Pair of dice
                                                                                                                                                                                                                        2. Pair of dice
                 Pair of dice 2.1 G = \{(1,4), (2,4), (3,4), (4,1), (4,2), (4,3)\} \checkmark 2.2 H = \{(1,1), (1,2), (1,3), (2,1), (2,2), (3,1)\} \checkmark 2.3 I = \{(1,2), (1,4), (1,6), (2,1), (2,3), (2,5), (3,2), (3,4), (3,6), (4,1), (4,3), (4,5), (5,2), (5,4), (5,6), (6,1), (6,3), (6,5)\}
                                                                                                                                                                                                                                  2.1 G = \{(1,4), (2,4), (3,4), (4,1), (4,2), (4,3)\} 

2.2 H = \{(1,1), (1,2), (1,3), (2,1), (2,2), (3,1)\} 

2.3 I = \{(1,2), (1,4), (1,6), (2,1), (2,3), (2,5), (3,2), (3,4), (3,6), (4,1), (4,3), (4,5), (5,2), (5,4), (5,6), (6,1), (6,3), (6,5)\} 

2.4 J = \{(2,4), (4,2)\}
                  2.4 J = \{(2,4), (4,2)\}
                           Activity 4.6.1: Basic Concepts of Probability
                                                                                                                                                                                                                                           Activity 4.6.1: Basic Concepts of Probability
                                                                Total points = 13
                                                                                                                                                                                                                                                                                  Total points = 13
    A. Answers
                                                                                                                                                                                                                    A. Answers
                                                                                                                                                                                                                         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
         2. S = \{HH, HT, TH, TT\}
                                                                                                                                                                                                                         2. S = \{HH, HT, TH, TT\}
         3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\} \checkmark
                                                                                                                                                                                                                        3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\} \checkmark
                S = \{Sunday, Monday, Tuesday, Wednesday, \}
                                                                                                                                                                                                                        4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                 Thursday, Friday, Saturday} ✓
                                                                                                                                                                                                                                  Thursday, Friday, Saturday} ✓
B. Answers
                                                                                                                                                                                                                    B. Answers
         1. A die and a coin
                                                                                                                                                                                                                         1. A die and a coin
                                                                                                                                                                                                                                   1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\} 

1.2 B = \{5H, 5T, 6H, 6T\} 

1.3 C = \{1T, 3T, 5T\} 

1.4 D = \{1H, 2H\} 

1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
                  1.1 A = {2H,2T,4H,4T,6H,6T} ✓

1.2 B = {5H,5T,6H,6T} ✓

1.3 C = {1T,3T,5T} ✓
                  1.4 D = \{1H, 2H\} \checkmark
1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\} \checkmark
         2. Pair of dice
                                                                                                                                                                                                                         2. Pair of dice
                  2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\}
                                                                                                                                                                                                                                   2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\}
                                                                                                                                                                                                                                  2.2 H = \{(1,1),(1,2),(1,3),(2,1),(2,2),(3,1)\} 
2.3 I = \{(1,2),(1,4),(1,6),(2,1),(2,3),(2,5),(3,2),(3,4),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),(3,6),
                  2.2 H = \{(1,1),(1,2),(1,3),(2,1),(2,2),(3,1)\} 
2.3 I = \{(1,2),(1,4),(1,6),(2,1),(2,3),(2,5),(3,2),(3,4),(3,6),
                            (4,1),(4,3),(4,5),(5,2),(5,4),(5,6),(6,1),(6,3),(6,5)
                                                                                                                                                                                                                                             (4,1),(4,3),(4,5),(5,2),(5,4),(5,6),(6,1),(6,3),(6,5)
                   2.4 \hat{J} = \{(2,4), (4,2)\} \checkmark
                                                                                                                                                                                                                                   2.4 J = \{(2,4), (4,2)\}
                           Activity 4.6.1: Basic Concepts of Probability
                                                                                                                                                                                                                                           Activity 4.6.1: Basic Concepts of Probability
                                                                 Total points = 13
                                                                                                                                                                                                                                                                                 Total points = 13
     A. Answers
                                                                                                                                                                                                                    A. Answers
         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
        2. S = \{HH, HT, TH, TT\}
                                                                                                                                                                                                                        2. S = \{HH, HT, TH, TT\}
         3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\}
                                                                                                                                                                                                                         3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\}
         4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                                                                                                                                                                                                                        \textbf{4. } \textit{S} = \{\textit{Sunday}, \textit{Monday}, \textit{Tuesday}, \textit{Wednesday},
                 Thursday, Friday, Saturday } ✓
                                                                                                                                                                                                                                 Thursday, Friday, Saturday} ✓
    B. Answers
                                                                                                                                                                                                                    B. Answers
         1. A die and a coin
                                                                                                                                                                                                                         1. A die and a coin
                                                                                                                                                                                                                                   1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\}
                   1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\}
                   1.2 B = \{5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                                   1.2 B = \{5H, 5T, 6H, 6T\}
                  1.3 C = \{1T, 3T, 5T\} 

1.4 D = \{1H, 2H\}
                                                                                                                                                                                                                                   1.3 C = \{17, 37, 57\}
                                                                                                                                                                                                                                   1.4 D = \{1H, 2H\}
                   1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\} \checkmark
                                                                                                                                                                                                                                   1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
         2. Pair of dice
                                                                                                                                                                                                                        2. Pair of dice
                  2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\}
                                                                                                                                                                                                                                   2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\}
                  2.2 H = \{(1,1), (1,2), (1,3), (2,1), (2,2), (3,1)\} 
2.3 I = \{(1,2), (1,4), (1,6), (2,1), (2,3), (2,5), (3,2), (3,4), (3,6), (2,3), (2,5), (3,2), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,6), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), (3,4), 
                                                                                                                                                                                                                                  2.2 H = \{(1,1), (1,2), (1,3), (2,1), (2,2), (3,1)\} 
2.3 I = \{(1,2), (1,4), (1,6), (2,1), (2,3), (2,5), (3,2), (3,4), (3,6), (2,6), (2,6), (2,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), (3,6), 
                             (4,1), (4,3), (4,5), (5,2), (5,4), (5,6), (6,1), (6,3), (6,5) 
                                                                                                                                                                                                                                             (4,1),(4,3),(4,5),(5,2),(5,4),(5,6),(6,1),(6,3),(6,5)\}
                  2.4 J = \{(2,4),(4,2)\} \checkmark
                                                                                                                                                                                                                                 2.4 J = \{(2,4),(4,2)\}
                           Activity 4.6.1: Basic Concepts of Probability
                                                                                                                                                                                                                                           Activity 4.6.1: Basic Concepts of Probability
                                                                                                                                                                                                                                                                                Total points = 13
                                                                Total points = 13
     A. Answers
                                                                                                                                                                                                                    A. Answers
         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
                                                                                                                                                                                                                         1. S = \{1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T\}
         2. S = \{HH, HT, TH, TT\}
                                                                                                                                                                                                                        2. S = \{HH, HT, TH, TT\}
         3. S = \{HHH, HHT, HTH, HTT, TTT, TTH, THT, THH\}
                                                                                                                                                                                                                        3. S = {HHH, HHT, HTH, HTT, TTT, TTH, THT, THH} ✓
         4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                                                                                                                                                                                                                        4. S = \{Sunday, Monday, Tuesday, Wednesday, \}
                 Thursday, Friday, Saturday } ✓
                                                                                                                                                                                                                                 Thursday, Friday, Saturday } ✓
     B. Answers
                                                                                                                                                                                                                    B. Answers
          1. A die and a coin
                                                                                                                                                                                                                         1. A die and a coin
                  1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\} 

1.2 B = \{5H, 5T, 6H, 6T\} 

1.3 C = \{1T, 3T, 5T\} 

1.4 D = \{1H, 2H\} 

1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
                                                                                                                                                                                                                                  1.1 A = \{2H, 2T, 4H, 4T, 6H, 6T\} 

1.2 B = \{5H, 5T, 6H, 6T\} 

1.3 C = \{1T, 3T, 5T\} 

1.4 D = \{1H, 2H\} 

1.5 E = \{1H, 1T, 2H, 2T, 3H, 3T\}
                                                                                                                                                                                                                        2. Pair of dice
         2. Pair of dice
                  Pair of dice 2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\} ✓ 2.2 H = \{(1,1),(1,2),(1,3),(2,1),(2,2),(3,1)\} ✓ 2.3 I = \{(1,2),(1,4),(1,6),(2,1),(2,3),(2,5),(3,2),(3,4),(3,6),(4,1),(4,3),(4,5),(5,2),(5,4),(5,6),(6,1),(6,3),(6,5)\} ✓ 2.4 J = \{(2,4),(4,2)\} ✓
                                                                                                                                                                                                                                  2.1 G = \{(1,4),(2,4),(3,4),(4,1),(4,2),(4,3)\} \checkmark
2.2 H = \{(1,1),(1,2),(1,3),(2,1),(2,2),(3,1)\} \checkmark
2.3 I = \{(1,2),(1,4),(1,6),(2,1),(2,3),(2,5),(3,2),(3,4),(3,6),(4,1),(4,3),(4,5),(5,2),(5,4),(5,6),(6,1),(6,3),(6,5)\} \checkmark
2.4 J = \{(2,4),(4,2)\} \checkmark
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