Teacher: S Valluru Time Frame: 50 minutes

Subject Matter: Sample Space

Anticipatory Set:

What are the possible outcomes of tossing a coin?

Objective: TSWBAT write the sample space of an experiment using the listing method and tree diagram.

Standards: DA – 1.1 & 1.2

Materials: Textbook, O.H.P. & Transparencies

**TELL ME**

Presentation of Information:

Definition of Terms:

**SHOW ME**

Example 1: Find the sample space of rolling two dice using the listing method.

|  |  |
| --- | --- |
|  | Die 2 |
| Die 1 | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | (1,1) | (1,2) | (1,3) | (1,4) | (1,5) | (1,6) |
| 2 | (2,1) | (2,2) | (2,3) | (2,4) | (2,5) | (2,6) |
| 3 | (3,1) | (3,2) | (3,3) | (3,4) | (3,5) | (3,6) |
| 4 | (4,1) | (4,2) | (4,3) | (4,4) | (4,5) | (4,6) |
| 5 | (5,1) | (5,2) | (5,3) | (5,4) | (5,5) | (5,6) |
| 6 | (6,1) | (5,2) | (6,3) | (6,4) | (6,5) | (6,6) |

Example 2: Find the sample space for the gender of children if a family has three children. Use B for boys and G for girls.

**LET ME TRY**

1. Find the sample space of drawing a card from on ordinary deck of card (no jokers). Use listing method.



1. Find the sample space of tossing three coins. Use tree diagram method.

1. Find the sample space of tossing a coin and rolling a die. Use listing method.

|  |  |
| --- | --- |
|   | Die |
| Coin | 1 | 2 | 3 | 4 | 5 | 6 |
| Head |   |   |   |   |   |   |
| Tail |   |   |   |   |   |   |

1. Find the sample space of tossing two coins and rolling a die. Use tree diagram method.

Homework:

Find the sample space of two dice and tossing a coin. Use the two methods.