

| Grade | Month         | Number of Sessions | Name of the Topics  | Name of Activity                         | Extra Activities |
|-------|---------------|--------------------|---|--|------------------|
| 1     | August        | 1                  | Hands-On Science Activities, Early Si                         | 1. Parts of body                         |                  |
|       |               | 1                  |   | 2. Ferris wheel                          |                  |
|       |               | 1                  |   | 3. Maze                                  |                  |
|       |               | 1                  |   | 4. Challenge-Animal Behavior             |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 2     | August        | 1                  | Hands-On Science Activities, Junior Scratch and Paper Circuit | 1. Magnetic and non-magnetic materials   |                  |
|       |               | 1                  |   | 2. Show and hide                         |                  |
|       |               | 1                  |   | 3. Introduction to paper circuit         |                  |
|       |               | 1                  |   | 4. Hanging a Bulb                        |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 3     | August        | 1                  | Robotics – Jodo Straw   | 1. Wheel and axe                         |                  |
|       |               | 1                  |   | 2. Incline Plane                         |                  |
|       |               | 1                  |   | 3. Lines                                 |                  |
|       |               | 1                  |   | 4. Angles                                |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 4     | August        | 1                  | Robotics – Simple Machine Kit                                 | 1. Wheel and axe                         |                  |
|       |               | 1                  |   | 2. Incline Plane                         |                  |
|       |               | 1                  |   | 3. Pulley                                |                  |
|       |               | 1                  |   | 4..one motor direction                   |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 5     | August        | 1                  | Robotics – Spike Essential                                    | 1. Car                                   |                  |
|       |               | 1                  |   | 2. Golf bot                              |                  |
|       |               | 1                  |   | 3. Package mover bot                     |                  |
|       |               | 1                  |   | 4. Final Project                         |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 6     | August        | 1                  | Robotics – Spike Essential and Hands-on Activity              | 1. complex machine                       |                  |
|       |               | 1                  |   | 2. final project                         |                  |
|       |               | 1                  |   | 3. Reflection by plane mirror            |                  |
|       |               | 1                  |   | 4. Like and unlike poles                 |                  |
|       | Total session | 4                  |   |  |                  |
|       |               |                    |   |  |                  |
| 7     | August        | 1                  | Robotics – Arduino  | 1. Introduction to Robotics and mechanic |                  |
|       |               | 1                  |   | 2. Types of movements                    |                  |
|       |               | 1                  |   | 3. Motion and Time                       |                  |
|       |               | 1                  |   | 4. Control statement                     |                  |
|       | Total session | 4                  |   |  |                  |

|   |               |   |                     |   |  |
|---|---------------|---|---------------------|---|--|
|   |               |   |                     |   |  |
| 8 | August        | 1 | Robotics – Arduino  | 1. Automatic Railway track barrier      |  |
|   |               | 1 |                     | 2. final project                        |  |
|   |               | 1 |                     | 3. Code for LCD                         |  |
|   |               | 1 |                     | 4. Analog Sensor                        |  |
|   | Total session | 4 |                     |   |  |
|   |               |   |                     |   |  |
| 9 | August        | 1 | Python and Robotics | 1. Mean Median Mode                     |  |
|   |               | 1 |                     | 2. Final Project                        |  |
|   |               | 1 |                     | 3. Range                                |  |
|   |               | 1 |                     | 4. Introduction to Arduino and software |  |
|   | Total session | 4 |                     |   |  |