**Wheels**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Traction** | **Complexity** | **Support** |
| **Weight** | **0.2** | **0.2** | **0.3** | **0.3** |
| 2 Wheels, 1 Castor | Low | Med | Low | High |
| 4 Wheels | Med | Med-High | Med | High |
| 3 Omni | Med | Med-High | High | Low-Med |
| Tracks | High | High | High | Med |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Traction** | **Complexity** | **Support** | **Total** |
| **Weight** | **0.2** | **0.2** | **0.3** | **0.3** | **1.0** |
| 2 Wheels, 1 Castor | 10 | 5 | 10 | 10 | 9.0 |
| 4 Wheels | 5 | 7.5 | 5 | 10 | 8.5 |
| 3 Omni | 5 | 7.5 | 0 | 0 | 5.5 |
| Tracks | 0 | 10 | 10 | 5 | 6.5 |

**Etch A Sketch**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Traction** | **Complexity** | **Modularity** | **Range for error** |
| **Weight** | **0.1** | **0.2** | **0.3** | **0.1** | **0.3** |
| Claw, 2 pinchers | Low | Low | Med | High | Low |
| Claw, 3 pinchers | Med | Med | High | Med | Low-Med |
| Design 1 | High | Med | High | Low | Low-Med |
| Design 2 | Low | High | Med | Low | High |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Traction** | **Complexity** | **Modularity** | **Range for error** | **Total** |
| **Weight** | **0.1** | **0.2** | **0.3** | **0.1** | **0.3** | 1.0 |
| Claw, 2 pinchers | 10 | 0 | 5 | 10 | 0 | 3.5 |
| Claw, 3 pinchers | 5 | 5 | 0 | 5 | 2.5 | 2.75 |
| Design 1 (wheel track) | 0 | 5 | 0 | 0 | 2.5 | 1.75 |
| Design 2 (hose clamp) | 5 | 10 | 5 | 0 | 10 | 7.0 |

**Rubik’s Cube**

|  |  |  |  |
| --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Complexity** | **Range for Error** |
| **Weight** | **0.2** | **0.4** | **0.4** |
| Claw, Claw | Med | High | High |
| Claw, Fitted Holder | Low-Med | Med | Med |
| Fitted Holder, Fitted Holder | Low | Low | Low |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Option** | **No. of Parts** | **Complexity** | **Range for Error** | **Total** |
| **Weight** | **0.2** | **0.4** | **0.4** | **1.0** |
| Claw, Claw | 5 | 0 | 10 | 5.0 |
| Claw, Fitted Holder | 7.5 | 5 | 5 | 5.5 |
| Fitted Holder, Fitted Holder | 10 | 10 | 0 | 6.0 |

**Chassis**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Option** | **Complexity** | **Flexibility** | **Durability** | **Cost** |
| **Weight** | **0.2** | **0.3** | **0.3** | **0.2** |
| Built | High | High | Med | Low |
| Bought 1 | Low | Low | Low | Low |
| Bought 2 | Low | Low | High | Med |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Option** | **Complexity** | **Flexibility** | **Durability** | **Cost** | **Total** |
| **Weight** | **0.2** | **0.3** | **0.3** | **0.2** | **1.0** |
| Built | 0 | 10 | 5 | 10 | 7.5 |
| Bought 1 | 10 | 0 | 0 | 10 | 5.0 |
| Bought 2 | 10 | 0 | 10 | 0 | 5.0 |