

```
engineering_approaches = {
  "Instance 1: Bulb": {
    "Comparative trial: equal": [
      "Attribute 1: 1 bulb",
      "Attribute 2: 2 bulbs"
    ],
    "Comparative trial: different": ["Attribute 1: 1 bulb vs. 2 bulbs"],
  },
  "Instance 2: Battery Voltage": {
    "Comparative trial: equal": [],
    "Comparative trial: different": [],
  },
  "Instance 3: Resistance": {
    "Comparative trial: equal": [
      "Attribute 1: 1 bulb",
      "Attribute 2: 2 bulbs different value",
      "Attribute 3: 2 bulbs (or 1 vs. 2) same value",
      "Attribute 4: 2 bulbs different value with changed position",
    ],
    "Comparative trial: different": [
      "Attribute 1: 1 bulb or 1 vs. 2 bulbs",
      "Attribute 2: 2 bulbs"
    ],
  },
  "Instance 4: Ammeter": {
    "Comparative trial: equal": [
      "Attribute 1: on/after/before 1 or 2 bulb",
      "Attribute 2: on high/low of 2 bulbs"
    ],
    "Comparative trial: different": [
      "Attribute 1: before vs. after 1 or 2 bulbs",
      "Attribute 2: on high vs. low of 2 bulbs"
    ],
  },
  "Instance 5: Voltmeter": {
    "Comparative trial: equal": [
      "Attribute 1: across 1 or 2 bulbs or battery",
      "Attribute 2: across high/low resistance of 2 bulbs"
    ],
    "Comparative trial: different": [
      "Attribute 1: across high vs. low resistance of 2 bulbs (or 1 vs. 2)",
      "Attribute 2: across high vs. low resistance of 2 bulbs vs. battery",
    ],
  }
}
```