**🎯 Activity 2: 🎭 Real-Life Scenarios – “Choose the Right Material”**

**🎙️ Activity Introduction**   
"Every day, people choose materials without realising it—conductors, insulators, shiny or dull, hard or brittle. In this game, you will help different characters select the right type of material for their tasks. Use what you know about metals and non-metals to make wise decisions."

**👨‍💻 Developer Guide Instructions**

* **Game Type:** Multiple-scenario decision-making role-play.
* **Layout:** One character and one scenario per screen, with two or three clickable options.
* **Feedback Mode:** Instant popup with hint-based explanation.
* **Visuals:** Each character has a themed illustration and prop icon (e.g., wire, pan, bulb).
* **Answer Buttons:** Clearly labelled — “Metal,” “Non-metal” (optional third choice: “Metalloid”).
* **Functionality:**
  + Highlight correct choice in green, incorrect in red.
  + Allow learner to retry after incorrect selection.

**📋 Learner Instructions (On-Screen)**

1. Read each character’s scenario carefully.
2. Think about the properties of metals and non-metals.
3. Click the option that best matches the required material.
4. Review the feedback to understand why your choice was correct or incorrect.

**💡 Hint Panel (On-Screen)**

**Material Selection Reminders:**

* **Metals:** Shiny, malleable, good conductors of heat and electricity, strong.
* **Non-metals:** Dull, brittle, poor conductors (insulators), low density.
* Always match the property needed in the scenario with the correct material type.

**🧪 Activity Content with Specific Facilitative Feedback**

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| --- | --- | --- | --- | --- |
| **Scenario** | **Prompt** | **Options** | **Correct/Incorrect** | **Facilitative Feedback** |
| **1: Beryl’s Circuit Wire** | Beryl wants a shiny material that conducts electricity for her science project. | Metal | ✅ Correct | Metals are good electrical conductors and often shiny. |
|  |  | Non-metal | ❌ Incorrect | Non-metals are usually poor conductors of electricity. |
| **2: Zara’s Decoration Base** | Zara needs a brittle, insulating material for her model house walls. | Non-metal | ✅ Correct | Non-metals like carbon or sulphur are brittle and insulate well. |
|  |  | Metal | ❌ Incorrect | Metals are not brittle—they are malleable and conduct heat. |
| **3: Kevin’s Cooking Pan** | Kevin is shopping for a frying pan that heats up quickly and is durable. | Metal | ✅ Correct | Metals conduct heat efficiently and are strong—perfect for cookware. |
|  |  | Non-metal | ❌ Incorrect | Non-metals do not conduct heat well and might break under high temperatures. |
| **4: Amina’s Light Bulb Support** | Amina is choosing a material for the part of a bulb that holds the wire but must not conduct electricity. | Non-metal | ✅ Correct | Non-metals like glass or plastic insulate and prevent current flow. |
|  |  | Metal | ❌ Incorrect | Metals conduct electricity, which is unsafe for insulating components. |
| **5: Timo’s Jewellery Design** | Timo wants a material that can be easily polished and shaped for beautiful jewellery. | Metal | ✅ Correct | Metals like gold and silver are malleable and shiny—perfect for jewellery. |
|  |  | Non-metal | ❌ Incorrect | Non-metals are not easily shaped and are rarely shiny. |
| **6: Fiona’s Science Fair Model** | Fiona is building a temperature-sensitive model and needs a good heat conductor. | Metal | ✅ Correct | Metals allow heat to pass through them easily. |
|  |  | Non-metal | ❌ Incorrect | Non-metals do not conduct heat well. |

**🎙️ Activity Conclusion**   
"You made informed decisions by linking each character’s need to the right type of material. Understanding the properties of metals and non-metals helps us choose wisely in real life. Keep practising and you will become a material expert!"