**🎯 Activity 1: 🔗 Drag-and-Drop Matching – "Match the Metal to Its Use"**

**🎙️ Activity Introduction 🎙️**

“Metals and alloys are everywhere, from the cables that power your devices to the shiny rings we wear. In this challenge, match each metal or alloy to the object it is best used to make. Use your knowledge of their special properties to find the perfect match!”

**👨‍💻 Developer Guide Instructions**

* **Activity Type**: Drag-and-Drop Matching
* **Draggables**: Icons with metal or alloy names  
  *(Copper, Aluminium, Steel, Gold, Brass, Stainless Steel, Bronze)*
* **Drop Zones**: Images or icons of common items  
  *(Jewellery, Sink, Trumpet, Can, Wire, Car Body, Coin)*
* **Functionality**:
  + Enable snapping of dragged items into targets
  + SFX: **Click** → drag, **Pop** → correct, **Buzz** → incorrect
  + Tooltip on hover: shows property *(e.g., “Copper – Good conductor”)*
  + Provide instant **facilitative feedback** on each drop
  + Unlock end-of-activity badge when all matches are correct

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

1. Look at the list of metals and alloys on the left.
2. Drag each metal or alloy to the object it is most commonly used for.
3. Use the hints to guide your choices.
4. After each drop, read the feedback to confirm or adjust your answer.

**💡 Hint (On-Screen)**

* Think about the property of each metal or alloy.
* Which ones resist rust? Which are good conductors? Which are shiny or light?
* Match based on use, not just appearance.

**📋 Activity Content – Matching Pairs + Property Clues**

|  |  |  |
| --- | --- | --- |
| **Metal / Alloy** | **Item** | **Key Property** |
| 🥫 Aluminium | Drink Can | Lightweight, corrosion-resistant |
| ⚡ Copper | Electrical Wire | Excellent conductor |
| 💍 Gold | Jewellery | Shiny, unreactive, soft |
| 🚗 Steel | Car Body | Strong and durable |
| 🚰 Stainless Steel | Sink | Rust-resistant, shiny |
| 🎺 Brass | Trumpet | Acoustic, malleable |
| 🏅 Bronze | Medals | Harder than pure copper, tough |

**💬 Facilitative Feedbacks (Per Choice)**

**🥫 Aluminium**

* ✅ “Great match! Aluminium is light and does not rust, making it perfect for cans.”
* ❌ “Think again. This metal should be light and rust-proof. What do we drink from?”

**⚡ Copper**

* ✅ “Correct! Copper is an excellent conductor, perfect for electric wiring.”
* ❌ “Oops! Which metal is known for allowing electricity to flow easily?”

**💍 Gold**

* ✅ “Spot on! Gold is shiny, unreactive, and used for luxury jewellery.”
* ❌ “Try again. Which metal stays shiny and does not tarnish?”

**🚗 Steel**

* ✅ “Well done! Steel is tough and perfect for building strong car bodies.”
* ❌ “Hint: Cars need a strong, affordable metal that holds shape.”

**🚰 Stainless Steel**

* ✅ “Yes! Stainless steel resists rust—perfect for sinks and kitchens.”
* ❌ “Remember, kitchen sinks need a metal that can resist water and corrosion.”

**🎺 Brass**

* ✅ “Fantastic! Brass has great acoustic properties, perfect for instruments.”
* ❌ “Think of a metal that makes clear, rich sounds in music instruments.”

**🏅 Bronze**

* ✅ “Good job! Bronze is harder than copper and used in medals.”
* ❌ “Look for a metal alloy that symbolizes strength and honour.”

**🎙️ Activity Conclusion**

“Well matched! Each metal or alloy has a unique strength—from conducting electricity to resisting rust or producing music. You have successfully connected each one to its everyday use—this is how science powers our modern world!”