**🎯 Activity 1: 🧠 Think & Match – “Name That Particle!”**

🎙️ **Activity Introduction** 🎤  
“Atoms are made of even smaller particles. Each has its own charge and place to stay. In this challenge, match each particle to its correct charge and location inside the atom. Think carefully and drag them to where they belong. Ready? Let us begin!”

**Developer Guide**  
• Draggables: Proton 🔴, Neutron ⚪, Electron 🔵  
• Drop Zones (x6 total):  
o Charges: ➕ Positive, ➖ Negative, ◼ Neutral  
o Locations: 🧠 Nucleus, 🌀 Energy Level  
• Each particle must be matched to both drop zones (use a two-column matching format).  
• Add snap animation on drop.  
• Trigger real-time feedback (correct/incorrect) after all matches are made.  
• Use particle icons and subtle motion loop (e.g., electron orbit animation if possible).

**Learner Instructions (On Screen)**  
Drag each particle to the correct:  
• Charge: ➕ Positive, ➖ Negative, ◼ Neutral  
• Location: 🧠 Nucleus or 🌀 Energy Level  
You must match both properties correctly for each particle.

**Hint (On Screen)**  
• Protons are positive and in the nucleus.  
• Neutrons are neutral and in the nucleus.  
• Electrons are negative and in energy levels.

**Activity Content**

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| --- | --- | --- |
| **Particle** | **Charge** | **Location** |
| Proton 🔴 | ➕ Positive | 🧠 Nucleus |
| Neutron ⚪ | ◼ Neutral | 🧠 Nucleus |
| Electron 🔵 | ➖ Negative | 🌀 Energy Level |

**Facilitative Feedback (Per Choice)**  
**Proton 🔴**  
• ➕ ➕ Positive: ✅ "Correct! Protons are always positively charged."  
• 🧠 Nucleus: ✅ "Excellent! Protons live inside the nucleus."  
• 🌀 Energy Level: ❌ "Protons do not orbit the nucleus. Try again."  
• ◼ Neutral: ❌ "Neutral is for neutrons. Protons are positive."

**Neutron ⚪**  
• ◼ Neutral: ✅ "Correct! Neutrons have no charge."  
• 🧠 Nucleus: ✅ "Yes! Neutrons stay in the nucleus with protons."  
• ➖ Negative: ❌ "Negative charge belongs to electrons, not neutrons."  
• 🌀 Energy Level: ❌ "Neutrons are too heavy to orbit. Try again."

**Electron 🔵**  
• ➖ Negative: ✅ "Correct! Electrons carry a negative charge."  
• 🌀 Energy Level: ✅ "Well done! Electrons move in energy levels around the nucleus."  
• ➕ Positive: ❌ "Positive charges are for protons, not electrons."  
• 🧠 Nucleus: ❌ "Electrons do not stay in the nucleus. Think again."

🎙️ **Activity Conclusion** 🎤  
“Fantastic work! You have correctly matched the particles of the atom. Now you know that protons and neutrons live inside the nucleus, while electrons move around in energy levels. Understanding this helps us explore how elements behave and bond. Keep going!”