**🧠 Activity 4: True or False – “Water Myths Busted!”**

**🎙️ Activity Introduction *(Mic Icon)***

“Water is full of surprises — and so are the myths people believe about it! In this activity, you will decide whether each statement is true or false. Use your science brain and everything you have learned so far to separate fact from fiction!”

**👨‍💻 Developer Guide Instructions**

* **Type:** Interactive Quiz with Feedback
* **Icons:** ✅ True / ❌ False / 🧠 Critical Thinking
* **Build Notes:**
  + Each question appears as a card with ✅ TRUE and ❌ FALSE buttons
  + Animate correct answers with a green highlight and tick; incorrect answers with red shake animation
  + Provide specific facilitative feedback for every choice
  + Display live score tracker and reveal badge at end

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

1. Read the statement on the card.
2. Select **TRUE** or **FALSE**.
3. Read the feedback to understand the science behind the statement.

**💡 Hint (On-Screen)**

“Use your science brain and everything you have learned so far to separate fact from fiction!”

**🧩 Quiz Questions with Facilitative Feedback**

**1️⃣ Question:** 🧠 “Pure water has a sweet taste.”

* TRUE ❌ → “Incorrect. Pure water has no taste. Sweetness indicates dissolved substances.”
* FALSE ✅ → “Correct! Pure water is tasteless. Any taste shows impurity.”

**2️⃣ Question:** 🧠 “Water boils at 100°C at sea level.”

* TRUE ✅ → “Well done. Water boils at 100°C under normal atmospheric pressure.”
* FALSE ❌ → “Try again. Under normal conditions, pure water boils exactly at 100°C.”

**3️⃣ Question:** 🧠 “If water smells like chlorine, it is pure.”

* TRUE ❌ → “Incorrect. Chlorine smell signals additives. Pure water has no odour.”
* FALSE ✅ → “Correct. Any detectable smell suggests impurity.”

**4️⃣ Question:** 🧠 “Green-tinted water is clean.”

* TRUE ❌ → “Not quite. Colour in water indicates dissolved or suspended impurities.”
* FALSE ✅ → “Excellent. Water should be completely colourless to be considered pure.”

**🎙️ Activity Conclusion *(Mic Icon)***

“Great job separating facts from myths! You now know what to trust when testing for water purity. Keep observing like a real scientist.”