Activity A. What electrical paths between a battery and a holiday light will light the bulb?

1. **PREDICT:** Mark each drawing below with a check-mark if you think it describes a path that will light up the bulb.

   - ![Diagram A]
   - ![Diagram B]
   - ![Diagram C]
   - ![Diagram D]
   - ![Diagram E]

2. **TEST:** Obtain a battery and a bulb and test your predictions.

   **What is required to make the bulb light?**
Activity B. Challenge: This is a bit harder…
Predict: Put a checkmark by the ones you think will light up.

Work with a partner to check which ones will light. Circle the ones that light up. **CAREFUL: DO NOT TOUCH THE BARE WIRE OR THE METAL PARTS OF THE BULB OR BATTERY WHEN DOING THIS EXPERIMENT: DIRECT CONTACT MAY RESULT IN A SKIN BURN.**

What connections are needed to make this bulb light?