

## Kit's Clever Coding Challenge

*Learning objective: To understand core programming concepts including algorithms, debugging, and input/output.*

Join Kit the fox for a quick coding quiz! Read each question carefully and circle the best answer or write your response in the space provided.

Answer Key: 1. A (Algorithm); 2. True; 3. Debug; 4. B (A set of repeating instructions); 5. False (It is a mistake in code); 6. Input; 7. Sequence; 8. C (To make the code work correctly); 9. True; 10. A (The information sent out by the computer).

*Word bank: Algorithm · Debug · Input · Output · Sequence · Loop · Variable · Bug*

**1. Kit needs a set of step-by-step instructions to solve a problem. What is this called? A) Algorithm\* B) Recipe C) Story D) Guess (1 mark)**

---

**2. True or False: A computer program must follow a specific order to work correctly. (1 mark)**

---

**3. When your code has a mistake and you need to fix it, what is this process called? (1 mark)**

---

**4. What is a 'loop' in programming? A) A type of knot B) A set of repeating instructions\* C) A circle shape D) A computer monitor (1 mark)**

---

**5. True or False: A 'bug' is a helpful feature that makes the computer faster. (1 mark)**

---

**6. When you press a key on a keyboard or click a mouse, this is known as an \_\_\_\_\_. (1 mark)**

---

**7. What do we call the order in which instructions are carried out? (Starts with S) (1 mark)**

---

**8. Why do we test our programs? A) To see if it looks pretty B) To see if it is loud C) To make sure the code works correctly\* D) To see if it is expensive (1 mark)**

---

**9. True or False: Computers can only do exactly what they are programd to do. (1 mark)**

---

10. What is 'Output'? A) The information sent out by the computer\* B) The power cord C) The screen brightness D) The keyboard (1 mark)

**Draw:** Draw a flowchart showing how you get ready for school in the morning. Use arrows to show the sequence of events!



*Extension challenge: If you were coding a robot to make a jam sandwich, what is the most important step you might forget? Write down the algorithm for 'spreading the jam' as clearly as possible for a computer to follow.*