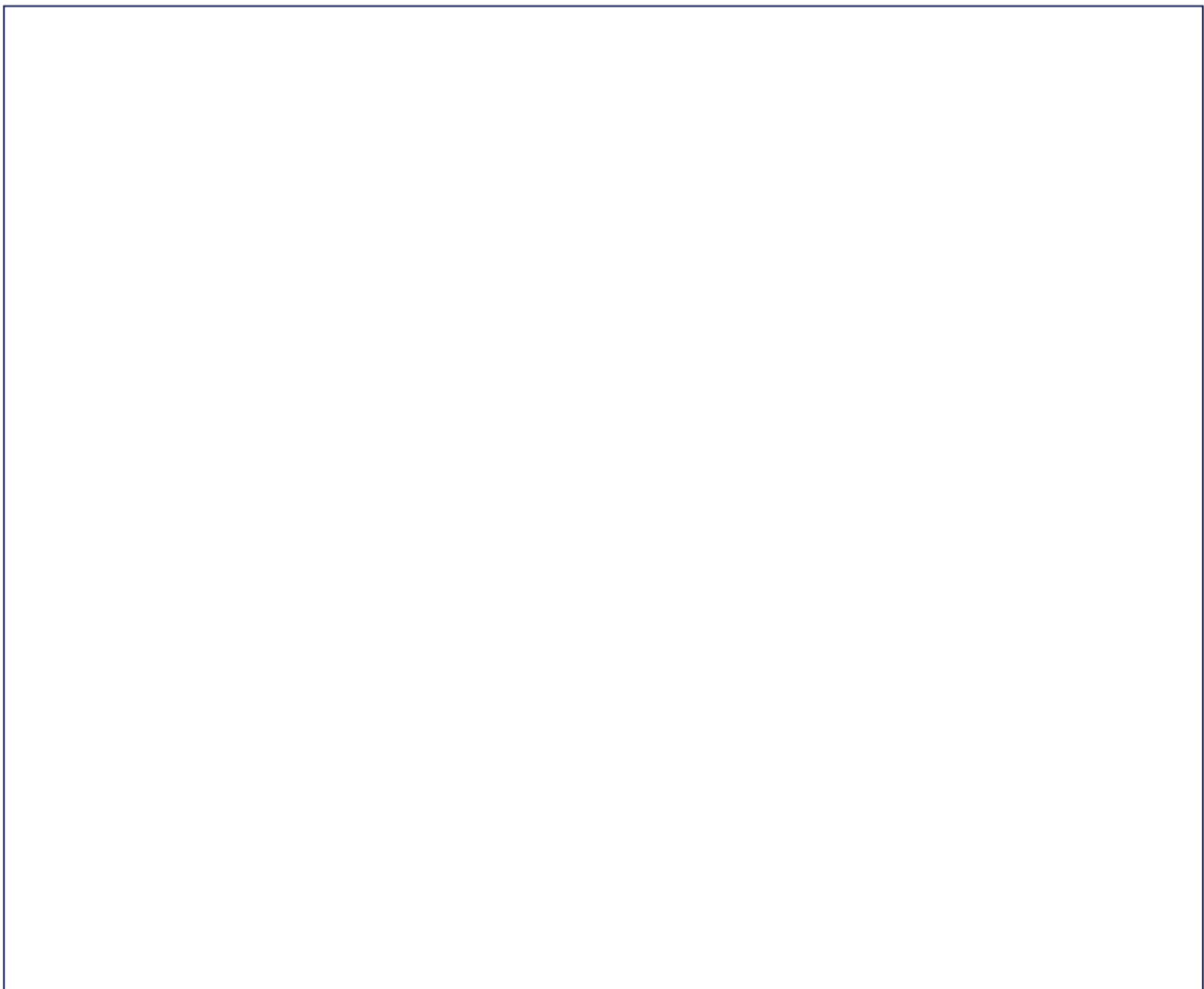


Kit's Computing Blueprint: Designing a Scratch Sprite

Learning objective: To understand the structure of a Scratch project by designing a custom sprite and identifying key computational blocks.

Kit the Fox is building a new interactive animation! Use the space below to draw your own original character. Once drawn, use the word bank to label the parts of your sprite's interface and the code blocks that will make it move.

Draw: Draw a central character (your sprite) in the middle of a large square representing the Scratch Stage. Surround the character with a border containing a 'Script Area' where you draw small rectangular blocks representing code. Use a clean, technical drawing style similar to an engineering blueprint. Include a small grid overlay on the stage to represent the x and y axes.



Label words: Sprite · Motion Block · Events Block · Stage · Coordinates (x, y) · Script Area · Costume

Steps:

1. Explain why it is important to choose a descriptive name for your sprite in the Scratch interface. How does this assist with debugging?
2. If your sprite is at coordinates (0,0) and you use the block 'change x by 10' five times, what will its new coordinates be? Justify your answer.

3. Compare and contrast a 'Motion' block and an 'Events' block. Why is an Events block necessary to start a sequence?
4. What might happen if you forget to include a 'When green flag clicked' block at the start of your script?
5. Label your drawing to show which part of your character you would change to create a 'costume' for animation.
6. Justify why using 'loops' is more efficient than repeating individual code blocks in your script.