

Final Outcome: We are working towards setting an algorithm challenge for a friend and completing an algorithm challenge set for me.

**Component 6:**

**What we will know after this sequence:**

LQ: Can I complete an algorithm challenge set for me?  
Children will be able to set challenges for each other.  
Children will understand how to create and debug a set of instructions (algorithms).  
Children will be able to change the background themselves.  
Children will be able to save their new challenge.  
Children will have tried each other's challenges as 2Dos.

**Vocabulary:**

Algorithm, instructions, challenge, understand

**How will this feed into my next learning:**

Children will be able to evaluate their model based on the process.

**SEN:**

Key words with images available.  
Step-by-step information available.  
IT support.



**Component 4:**

**What we will know after this sequence:**

LQ: Do I know what an algorithm is?  
Children will be able to explain what an algorithm is.  
Children will learn how to an algorithm.  
Children will know how to debug their algorithm.  
Children will be able to explain how to create an algorithm and how to debug it.

**Vocabulary:**

Algorithm, create, debug, key

**How will this feed into my next learning:**

Children will be able to use the additional direction keys to create a new algorithm.

**SEN:**

Key words with images available.



**Component 5:**

**What we will know after this sequence:**

LQ: Can I use the additional direction keys as part of my algorithm?  
Children can change and extend the algorithm list.  
Children can create a longer algorithm for an activity.  
Children can challenge themselves by using the longer algorithm to complete challenges.

**Vocabulary:**

Algorithm, direction, keys, extend, activity

**How will this feed into my next learning:**

Children will be ready to set algorithm challenges for each other.

**SEN:**

Key words with images available.



**Component 3:**

**What we will know after this sequence:**

LQ: Can I apply my understanding of the direction keys in a game?  
Children will be able to use the diagonal direction keys to move their characters in the desired direction.  
Children will be able to explain to a friend which directional keys to use to complete a game.  
Children will be able to explain how they have achieved their goal in the game.

**Vocabulary:**

Direction, diagonal, direction, key, algorithm.

**How will this feed into my next learning:**

Children will be ready to use algorithms.

**SEN:**

Key words with images available.



**Component 2:**

**What we will know after this sequence:**

LQ: Can I apply my understanding of the directional keys in a game?  
Children will be able to use the diagonal direction keys to move their characters in the desired direction.

**Vocabulary:**

Direction, diagonal, direction, key, algorithm.

**How will this feed into my next learning:**

Children will continue to apply their understanding of the directional keys.

**SEN:**

Key words with images available.



**Component 1:**

**We should know:**

How to use a mouse and keyboard. Children can explore Newsround and search using Kiddle.

**What we will know after this sequence:**

LQ: Do I understand the functionality of the basic direction keys?  
Children will use direction keys on 2Go to move forwards, backwards, left and right.  
Children will know how to undo their last move.  
Children will know how to move their character back to the starting point.

**Vocabulary:**

Direction, key, forwards, backwards, left, right

**How will this feed into my next learning:**

Children will continue to apply the skills learned in this component.

**SEN:**

Key words with images available.  
IT support available.

