



### The **BIG** Picture

Learning about the main parts of a computer and how to use the keyboard and mouse. Logging in and out

### Unit Outcome

To learn what a keyboard is and how to locate relevant keys

- To learn what a keyboard is and how to locate relevant keys.
- To learn how to log in and log out.
- To understand why we need to log in and out.
- To learn what a mouse is and to develop basic mouse skills such as moving and clicking.
- To use a simple online paint tool to create digital art.



### Observations

- Can they name the keyboard?
- Can they explain what a keyboard is used for?
- Can they recognise and identify any familiar letters, numbers or symbols on the keyboard?
- Can they find the letters in their own name?
- Are they aware of any other names for the different computer parts (mouse etc.)?
- Use the phrases 'log in' and 'log out' correctly?
- Recognise and identify any familiar letters, numbers or symbols on the keyboard?
- Find the letters in their own name?
- Find and use the tab key?
- Demonstrate awareness of why it is important to have a password?
- Use and navigate with the mouse?
- Explain what the mouse is for?
- Move the mouse and navigate around the screen with accuracy?
- Left-click on the mouse?
- Hold their finger down on the left button while moving the mouse?
- Use basic mouse skills to make marks on the screen using the paint application?
- Recall how to move and use the mouse?
- Left- click and then release in order to create a stamp on screen?
- Navigate around the screen with some accuracy?
- Use their basic mouse skills to make stamp art on the screen using the paint application?

### EYFS Outcomes

#### **Literacy**

- Spell words by identifying the sounds and then writing the sound with letter/s.
- Re-read what they have written to check that it makes sense.

#### **Mathematics**

- Link the number symbol (numeral) with its cardinal number value.

#### **Characteristics of Effective Learning**

- Playing and exploring
- Active learning

#### **Physical development**

- Develop their small motor skills so that they can use a range of tools competently, safely and confidently.





### The **BIG** Picture

The children learn to receive and give instructions and understand the importance of precise instructions

### Unit Outcome

To follow instructions as part of practical activities and games

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- To follow instructions as part of practical activities and games
- To learn to give simple instructions
- To follow instructions as part of practical activities and games and to learn to debug when things go wrong
- To learn to give simple instructions
- To learn that an algorithm is a set of instructions to carry out a task, in a specific order
- To learn how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary



### Observations

- Who can respond to instructions?
- Who can respond to more than one instruction when given at the same time?
- Do any of the children need to have the instruction repeated multiple times?
- Are they giving simple but relevant instructions?
- Are they listening attentively and following the instructions given?
- Are they using appropriate vocabulary and positional language?
- Do they understand positional language when following instructions?
- Give simple and relevant instructions?
- Use appropriate and relevant vocabulary as they give instructions?
- Give a two-part instruction?
- Listen attentively and follow the instructions?
- Understand the concept of the game and follow the rules?
- Realise that there is a problem with the original set of instructions?
- Offer a solution to debug the problem on their own?
- Understand the need to give clear, specific instructions?
- Give a simple, relevant instruction?
- Understand why the original sequence went wrong?

### EYFS Outcomes

#### Communication and language

- Understand how to listen carefully and why listening is important
- Articulate their ideas and thoughts in well-formed sentences.
- Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.
- Describe events in some detail.

#### Personal, social and emotional development

Build constructive and respectful relationships.

- ELG: Self-regulation:** Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.
- ELG: Managing self:** Be confident to try new activities and show independence, resilience and perseverance in the face of challenge
- ELG: Building relationships:** Work and play cooperatively and take turns with others

#### Physical development

- Know and talk about the different factors that support their overall health and wellbeing
- Further develop the skills they need to manage the school day successfully

#### Characteristics of Effective Learning

- Active learning
- Creating and thinking critically



### The **BIG** Picture

Tinkering and exploring with different computer hardware and learning to operate a camera

### Unit Outcome

To learn how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary

- To learn how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary
- To recognise that a range of technology is used in places such as homes and schools
- To learn how to operate a camera and/or iPad and use it to take photographs.



### Observations

- Show an interest in exploring the objects?
- Assimilate new vocabulary given by an adult or peer and use it themselves?
- Ask relevant questions about the objects?
- Show critical thinking or problem-solving skills when exploring the items?
- Show pre-existing knowledge of the names or uses of any of the items?
- Match the objects on the tuff tray to the relevant picture?
- Make connections with technology used at home?
- Do they show any prior knowledge of using a camera or tablet to take a photograph?
- Can they take a photograph independently or do they need support?
- Do they show an interest in making sure they take a photo correctly (subject is in shot, not blurry)?
- Can they make connections with taking photographs at home?
- Recall how to use a camera or tablet to take a photograph?
- Take photographs independently or do they need support?
- Show an interest in making sure they take a photo correctly (subject is in shot, not blurry)?
- Make connections with taking photographs at home?
- Do they show any recollection of how to use the camera or tablet to take a photograph?
- Are they aware of how to flip the screen so that they can see themselves?
- Can they make any comments about what they can see as they look at themselves on the screen?
- Are they able to talk about themselves in positive terms?

### EYFS Outcomes

#### **Communication and language**

- Learn new vocabulary
- Use new vocabulary through the day
- Articulate their ideas and thoughts in well-formed sentences
- Ask questions to find out more and to check they understand what has been said to them
- Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen

#### **Understanding the world**

- Describe what they see, hear and feel whilst outside (or inside)

#### **Personal, social and emotional development**

- See themselves as a valuable individual

#### **Physical development**

- Develop their small motor skills so that they can use a range of tools competently, safely and confidently
- Confidently and safely use a range of small apparatus, alone and in a group

#### **Characteristics of Effective Learning**

- Playing and exploring

#### **Literacy**

- Spell words by identifying the sounds and then writing the sound with letter/s
- Write short sentences with words with known sound-letter correspondences using a capital letter and full stop



### The **BIG** Picture

Children learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware

### Unit Outcome

- To understand the meaning of directional arrows
- To follow a simple sequence of instructions
- To experiment with programming a Bee-bot/Blue-bot
- To explore and tinker with hardware to develop familiarity and introduce relevant vocabulary
- To learn to debug instructions, with the help of an adult, when things go wrong
- To learn that an algorithm is a set of instructions to carry out a task, in a specific order
- To follow an algorithm as part of an unplugged game



### Observations

- Are the children able to follow simple instructions?
- Do the children recognise the meaning of different arrows?
- Can the children use their knowledge of the meaning of arrows to move in the correct direction?
- Show an interest in pressing the buttons on the Bee-Bot to see what happens?
- Use their critical thinking skills to explore the functions of the Bee-Bot?
- Have an awareness of how to use the Bee-Bot?
- Use their knowledge of the meaning of arrows to try to program the Bee-Bot?
- Recall the meaning of directional arrows?
- Use their knowledge of the meaning of arrows to try to program the Bee-Bot?
- Associate the picture of an arrow with the movement of the Bee-Bot?
- Identify a problem?
- Solve a simple problem when given some adult guidance?
- Follow the sequence on their card and move in the correct way?
- Identify a problem?
- Show an awareness of the meaning of an algorithm?

### EYFS Outcomes

#### **Personal, social and emotional development**

##### ELG: Managing self

- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge

#### **Mathematics**

- Count objects, actions and sounds.
- Link the number symbol (numeral) with its cardinal number value.
- Count beyond ten.

#### **Characteristics of Effective Learning**

- Playing and exploring
- Active learning
- Creating and thinking critically



### The **BIG** Picture

Children sort and categorise data and are introduced to branching databases and pictograms

### Unit Outcome

- To understand how to sort and categorise objects.
- To explain how items have been sorted and categorised.
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- To explain how items have been sorted and categorised.
- To explore and understand the concept of branch databases
- To understand how to represent data in a pictogram
- To understand how to read a simple pictogram

### Observations

- How do they choose to sort the objects?
- Can they explain why they have chosen to sort them in a specific way?
- Are they able to join you in sorting the items in a way in which you have chosen?
- Are they able to work together to categorise themselves?
- Can they identify problems and offer a solution?
- Can they explain why they have chosen to sort themselves in a specific way?
- Are they able to listen carefully and understand the question?
- Are they able to ask relevant questions?
- Do the children understand that by some children sitting and some standing, you are sorting the data?
- Can they explain how you have sorted them?
- Can they follow the arrows?
- Are they able to suggest a relevant question?
- Can they explain how you have sorted them?
- Do they show an understanding of what a branch database is?
- Listen carefully and follow your instructions?
- Position their fruit correctly on the pictogram?
- Count with you as you evaluate the pictogram?
- Use the pictogram to decide which are the most and least popular fruits?

### EYFS Outcomes

#### **Communication and language**

- Articulate their ideas and thoughts in well-formed sentences
- Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen
- ELG: Listening, attention and understanding: Make comments about what they have heard and ask questions to clarify their understanding.
- ELG: Listening, attention and understanding: Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.
- ELG: Speaking: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

#### **Mathematics**

- Count objects, actions and sounds
- Subitise
- Count beyond ten
- Compare numbers
- Understand the 'one more than/one less than' relationship between consecutive numbers
- Continue, copy and create repeating patterns
- Compare length, weight and capacity
- ELG: Numerical patterns: Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity

#### **Characteristics of Effective Learning**

- Playing and exploring
- Active learning
- Creating and thinking critically

