Glow and Go Bot Activity Ideas

Here are some activity ideas that the children may wish to try with the Glow and Go Bot. They have been written in conjunction with our educational partners.

Some of these activities have links to early computing skills and are ideal for introducing basic programming into the later stages of the Early Years. However, they can also be used with children moving on from this stage, transitioning into more formal education.

We know the children will have their own ideas and interests, so these are just insights to share with you.

Glow and Go Bot Activity 1

Aims

- Expressing ourselves through play and creativity
- Learning about cause and effect
- Responding to music
- Exploring rhythms

You will need:

- TTS Glow and Go Bot
- Some space to move around in

Musical Movement

This activity promotes physical development, as children engage in gross motor skills while dancing. It also introduces cause and effect relationships. As well as learning about how Glow and Go Bot moves, and exploring directional language such as left and right, this activity encourages children to use technology in creative ways. Children enjoy the musical elements of Glow and Go Bot and can listen for different rhythms and how they correlate to the different movements of the robot.

1 – Setting Up

Ensure Glow and Go Bot is set to Mode 1 (Directional Movement with Music). Gather children in a circle or open space where they have enough room to observe Glow and Go Bot's movements. Introduce Glow and Go Bot and explain that it can move in different directions while playing music when the colour-coded buttons are pressed. Allow children to start with a few experiments before delving into specific tasks and lines of questioning.

2 – Music Time

Encourage one child to come forward and press one of the colour-coded directional buttons. As Glow and Go Bot moves and plays music, ask the child questions such as:
• Where do you think Glow and Go Bot is going?
• What do you notice when you press the blue (or any other colour) button?
• Can you show us how Glow and Go moves when you press the green button?
Allow each child to take turns pressing a button and guiding Glow and Go Bot's movement. Encourage children to move around and follow Glow and Go Bot's path, promoting physical activity. They can also dance along with Glow and Go!

3 – Discussions

Create opportunities for discussion, such as:
• What happens when you press the middle star button?
• How can you make Glow and Go Bot go in a circle?
• Can you predict which direction Glow and Go Bot will go when you press a specific button?

Glow and Go Bot Activity 2

Aims

- Expressing ourselves through play and creativity
- Learning about cause and effect
- Giving directions and communicating
- Creating basic programmes

You will need:

- TTS Glow and Go Bot
- Some space to move around in!
- Optional: Coloured cards to correspond with the Glow and Go Bot buttons – yellow, blue, green and purple

Follow the Leader

This activity promotes teamwork, problem-solving, and sequencing skills through programming Glow and Go Bot, encouraging children to work together, make decisions, and develop logical thinking skills.

This activity also promotes mathematical understanding of patterns and sequences. Children can learn about how technology can work in real-world situations as well as enjoying interacting with the music, lights, and movement.

1 – Setting Up

Set Glow and Go Bot to Mode 2 (Programming Mode). Gather children in small groups, providing each group with a Glow and Go Bot. You can do this in small groups at different times or work with the whole class by seating children in a circle and choosing children to come to the middle to work with Glow and Go while others make suggestions. If you wish to use the coloured cards, you can add further elements which allow children to plan and work together to plan their programmes. You will need multiple cards in the 4 colours on Glow and Go.

2 – Programming Time

Explain to the children that they are going to work together to programme a sequence of movements for Glow and Go Bot. Each child in the group takes turns pressing the directional buttons to programme a step. They can discuss and decide on the sequence as a group, considering questions like:
• Which direction should Glow and Go Bot go first?
• How many steps should Glow and Go Bot take?
Once the sequence is programmed, one child presses the middle star button to execute the programme. Use the cards to lay out the programme before pressing the buttons as a way to promote the planning stages.

3 – Discussions

Ask questions during and after execution, such as:
• Did Glow and Go Bot follow the programme correctly?
• What could you change to make Glow and Go's path more interesting?
• Can you explain what you wanted Glow and Go to do?
Encourage children to create longer and more complex sequences as they become more confident up to the maximum 10 steps.
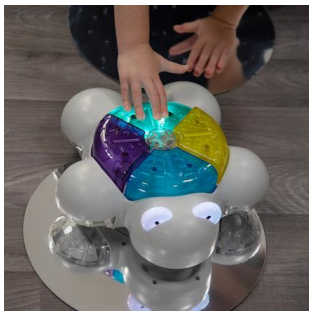
Glow and Go Bot Activity 3

Aims

- Expressing ourselves through play and creativity
- Giving directions and communicating
- Being experimental and inspiring curiosity

You will need:

- TTS Glow and Go Bot
- Some space to move around in!
- Optional: Extra TTS Light Up Glow technology such as the Glow Spheres or Cylinders.

Dance Party

This activity helps to engage children in creative and expressive movement while exploring Glow and Go Bot's random dance capabilities. This activity encourages expressive arts and design, allowing children to express themselves through dance and movement. It provides a fun and interactive way to develop their physical coordination and express their creativity. They also love seeing the lights on Glow and Go Bot, which can stimulate their senses.

1 – Setting Up

Ensure Glow and Go Bot is set to Mode 1 (Directional Movement with Music) or Mode 2 (Programming Mode). Create an open space for the activity. You may wish to turn down the lights so that children can create a 'disco' party atmosphere. Risk assess the area, making sure there is nothing for them to trip over on as they will be moving about freely in the space. If you have any other TTS Glow technology you could add this too, such as the Light Up Cylinders which they could use as 'glow sticks' for dancing with for an exciting fun fiesta!

2 – Programming Time

Start by discussing the concept of dancing with the children. You can play some music to set the mood. Encourage children to take turns pressing the middle star button without selecting any directional buttons. As Glow and Go Bot moves and plays its random dance music, invite the children to join in and dance alongside. Allow children to lead and explore their creative dance moves while Glow and Go Bot continues its random dance. If the children do start wanting to use the specific buttons, then you could allow them to plan out and make their own dance programmes. Give children turns to be the 'DJ' for the party by using Glow and Go buttons to decide on the music.

3 – Discussions

Ask questions and provide prompts such as:
• How does Glow and Go Bot move when it's dancing?
• Can you mimic Glow and Go Bot's dance moves?
• What kind of dance can you do to this music?
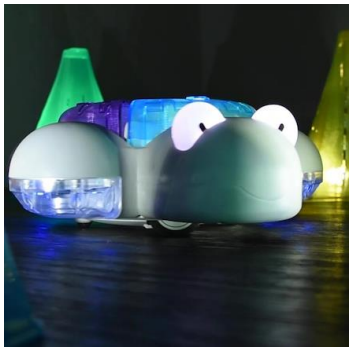
Glow and Go Bot
Activity 4

Aims

- Expressing ourselves through play and creativity
- Learning about cause and effect
- Giving directions and communicating
- Creating basic programmes and debugging

You will need:

- TTS Glow and Go Bot
- Optional: Colour cards to correspond with the Glow and Go Bot buttons – yellow, blue, green and purple

Musical Patterns

This activity introduces children to basic sequencing and pattern recognition using Glow and Go Bot's directional buttons and music. Children practise sequencing and pattern recognition and develop their mathematical understanding by exploring simple patterns. It also lays the foundation for understanding algorithms and sequences in the context of the computing curriculum.

1 – Setting Up

Set Glow and Go Bot to Mode 3 (Music Mode without Movement). Arrange a quiet and comfortable space for this activity. You may also want to have some coloured cards which correspond with the colour buttons so that children can practise making sequences and seeing them laid out in front of them. This will also help children to predict what Glow and Go will do, as well as helping them to 'debug' the programme if they want to make changes to the pattern and sequence.

2 – Programming Time

Explain to the children that they will create musical patterns by pressing the directional buttons on Glow and Go Bot. Demonstrate how to press the buttons in a sequence to create a simple pattern. Press the centre 'star' button so that Glow and Go Bot follows the instructions.

Ask the children questions such as :
• What does the music sound like when you press the buttons?
• Can you make a pattern for your friend to listen to and repeat?

Encourage children to take turns creating and repeating musical patterns with Glow and Go Bot. They can also lay out the cards to show the sequence they are making and work together to plan out a new sequence.

3 – Discussions

Discuss the patterns they create and ask questions like:
• What comes next in your pattern?
• How many steps are in your pattern?
• Can you create a longer pattern?
• What can you change in your pattern?

Glow and Go Bot
Activity 5

Aims

- Expressing ourselves through play and creativity
- Learning about cause and effect
- Sharing stories with our friends
- Creating basic programmes and debugging

You will need:

- TTS Glow and Go Bot
- Optional: Some obstacles or settings for Glow and Go to move through or navigate around

Story Time

This activity enhances communication and language skills while using Glow and Go Bot as a storytelling tool, allowing children to develop their ability to narrate stories and use their imagination. It also encourages collaboration and creativity as they work together to progress their story. Children will be encouraged to create some stories of their own during independent learning time with Glow and Go later.

1 – Setting Up

Ensure Glow and Go Bot is set to either Mode 1 (Directional Movement with Music) or Mode 2 (Programming Mode). Create a storytelling area with a comfortable seating arrangement for the children. Older children may benefit from Mode 2 to make longer sections of the story each time, younger children will likely benefit from Mode 1 so that they can just focus on one movement. You can choose to have the music turn on or off. Some children relate the sound to the movement, but for some they may find it distracts them from the story.

2 – Programming Time

Begin by introducing Glow and Go Bot and explaining that it can be part of an exciting adventure story. Start a simple story involving Glow and Go, such as "Once upon a time, Glow and Go Bot set out on a magical journey..."

Pass Glow and Go to one child and ask them to choose a direction and press a colour-coded button to guide the movement.

After each child's turn, encourage them to narrate what's happening in the story based on Glow and Go Bot's actions. Continue the story, passing Glow and Go to different children to contribute to the narrative, or inviting them to come to the middle of the circle. If using Mode 2 (Programming) allow children to create a short programme to narrate so that they can build a longer section of the story.

3 – Discussions

Ask open-ended questions to prompt storytelling, such as:
• Where is Glow and Go going next?
• What challenges might Glow and Go face?
• What does Glow and Go discover on its adventure?
You may wish to add obstacles during the story so that they need to navigate around them and build that into the adventure narration.

Glow and Go Bot Activity 6

Aims

- Expressing ourselves through play and creativity
- Learning about cause and effect
- Problem-solving and teamwork
- Developing language and communication
- Planning out a sequence

You will need:

- TTS Glow and Go Bot
- Colour cards to correspond with the Glow and Go Bo buttons – yellow, blue, green and purple
- Challenge cards with a variety of instructions for Glow and Go Bot.

Button Bonanza

This activity encourages problem-solving, critical thinking, and communication skills by setting challenges for children using Glow and Go Bot. Children develop critical thinking skills while practising communication and teamwork. It introduces concepts of algorithmic thinking from the computing curriculum, fostering a foundation for computational skills, as well as encouraging language and communication.

1 – Setting Up

You can choose to set Glow and Go Bot to any of the three available modes. You may wish to judge that based on the ages and stages of the children working in the group for this activity. Prepare a list of challenges or tasks that the children can accomplish using Glow and Go Bot's buttons. Make these achievable for the children in the group. Some examples can be found in the next section.

2 – Programming Time

Gather the children and explain that they will be presented with a series of challenges to complete with Glow and Go Bot. Provide a variety of challenges that require pressing specific buttons or creating sequences. For example:
• Make Glow and Go Bot move in a <choose a shape>.
• Create a pattern using the directional buttons.
• Make Glow and Go Bot move to <a specific point in the room>.
• Program a dance routine for Glow and Go Bot.
Ask the children to take turns selecting a challenge card or task. Encourage them to work together in pairs or small groups to solve the challenges using Glow and Go Bot's buttons.

3 – Discussions

Facilitate discussions and ask questions such as:
• How are you going to solve this challenge?
• What buttons do you need to press to complete the task?
• Can you explain your solution to the group?
Celebrate the children's successes and creativity in completing the challenges.

Many thanks to Jodie Lopez for creating these activities.