



# ISOBEL MAIR SCHOOL

SEND/ASN Pilot May 2024



Isobel Mair School is interdenominational and co-educational and provides provision for pupils, aged 5-18 years who have complex additional support needs.

Approximately **16 million people** in the UK are registered as disabled.

## Objective

Provide a **tailored STEM experience**, pilot a **new slide format** and learn more about the **practicalities of operating in a SEND/ASN class**.

## Why?

We at STEMAZING believe that **STEM is for everyone**. Working towards a more diverse and inclusive STEM workforce will ensure we won't miss out on the talent and ideas that are critical for the **inclusive innovation** and **creative problem solving** required to tackle the challenges that impact us all.

Spark aims to provide **accessible and equitable STEM activities** tailored to the requirements of young people with additional support needs, **inspiring confidence and passion for STEM subjects** among young people who have **disabilities and neurodivergent characteristics**.

## First steps

The team had a meeting with the school prior to engagement and identified the following key needs to consider:

- majority of learners working at CfE Pre Early / Early level
- varied fine motor skills
- fixed wheelchair users
- non-verbal learners
- sensory issues around blowing into a straw.

**20% of the workforce** in the Engineering sector are likely to be neurodivergent.



## What we delivered

We delivered STEMAZING's Straw Rocket Blaster activity to **3 classes** of **different ages and support needs**.

- **Makaton signs** were used when introducing push and pull forces.
- A **break** was included in the session giving learners the option to rest, move to a song related to the activity or play with putty to further explore forces.
- Learners were given **pre-prepared** rocket templates and boosters to simplify the build stage.
- A balloon pump was adapted as an **alternative to blowing into a straw**.
- Non-verbal learners could give feedback at the end of the session by pointing to **facial expressions on the board**.



Happy



## Result

- Some learners were **not used to slides** as part of their learning input.
- The **break options** were very well received.
- The balloon pump adaptation allowed **every learner to take part** in the activity.
- The **interactive** parts of the session had the most engagement.
- Participants provided **positive feedback** using the facial expressions on the board, a Makaton sign or verbally.

## Recommendations

- **Early communication with the school** to establish session aims and objectives.
- Understanding of **individuals capabilities and needs to problem solve and adapt** STEM activities for a specific group.
- **Include a break** mirroring the length of time learners are usually required to focus for in class.
- Incorporating as many **physical and interactive elements** as possible.

