

# SCIENCE MUSEUM GROUP

## TOP TIPS: RUNNING EXPLORATION AND DISCOVERY STEM CLUBS

Clubs enable people to explore and discover science, technology, engineering and maths (STEM) beyond the classroom. They provide a unique enrichment opportunity to develop new skills, build confidence and increase interest and enjoyment in STEM subjects and their real-world context.

Here we share some of our top tips for planning and running an exploration and discovery club...

### PLANNING YOUR CLUB

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# 1

#### PROMOTE THE JOY OF DISCOVERY

Science is a creative and imaginative human endeavour; it is a way of thinking, asking questions and observing the world around us. By focusing on key skills such as problem-solving, teamwork and communication, rather than just content knowledge, you can inspire people to follow their curiosity and discover science on their own terms. Approaching science in this way will show it is accessible and has value and benefit to everyone, as well as being great fun!

# 2

#### GO BEYOND EXPERIMENTS

Club activities are only limited by your imagination – try craft projects, games or digital experiences which promote science skills, or explore STEM content by creating a magazine, planning an event or running a science-themed film or book club. Why not invite people in from your local community who have interesting hobbies or jobs? You could also consider going on visits out and about in your local area.



# 3

#### HAVE A THEME OR A FOCUS

Plan your activities around a theme or have a focus that will make your club feel different to a formal lesson. Run team-based projects or competitions that will run for a number of weeks, or research a specific problem or issue that is relevant to your community. Why not get your club members involved with generating ideas to give them more ownership and help it feel more relevant to them? You never know what ideas they have until you ask.

# 4

#### MEASURE YOUR SUCCESS

What do you want your group to get from the experience? Are there specific outcomes you want to achieve? From developing interpersonal skills, to growing confidence with STEM subjects, think about what success would look like – for you and your group. There are lots of ways to demonstrate your achievements. You can get creative with obtaining feedback using ideas such as pebble voting at the beginning and end of your club or capture the experiences with pictures.



# 5

#### DON'T WORRY IF THINGS GO WRONG

Experience the thrill of making your own discoveries. Curiosity is at the heart of science, so if you don't know the answer to something, use that as an opportunity to find out more as a group. Similarly, if something goes wrong or doesn't work, use your club's scientific and engineering skills to work out why and then have another go. Make sure you have spare supplies and always do a risk assessment for all your activities.

# 6

### START SIMPLE

Base initial sessions on tried-and-tested activities that you feel confident with. Once your group is hooked you can get more adventurous. Plan a block of about six activities which you feel will be realistically achievable. It may take a while before a club is doing all the things you would like, but it's better to build it up slowly and create a sustainable club than doing too much at once. To help inspire you, there are lots of science organisations and websites with ideas and free resources to support clubs.

# 7

### GET CREATIVE WITH RECRUITMENT

Who do you want to come to your club? Will it be open to anyone, or do you want to target specific people who may not be confident with science? How many people will you be able to accommodate? When and where will your club run? Help everyone feel welcome and included by advertising your club in places where you know your target audience will be looking, and remember to focus on the experience they will have at the club rather than subject content.



# 8

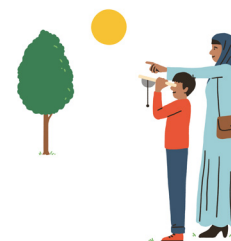
### DON'T DO IT ALONE

A successful club needs an enthusiastic individual to drive it forward, but this doesn't mean you have to do all the work on your own. Involve technicians, colleagues, parents, older children or STEM Ambassadors. Encourage your group to take on roles and responsibilities to help you run the club, including developing and leading sessions and promoting the work they do. It should become their club – not just yours.

# 9

### SHOWCASE AND SHOUT ABOUT WHAT YOU DO

Showcase your club and its opportunities and achievements by celebrating your work. Plan a taster event or an exhibition, and invite friends, families and local community supporters along and encourage them to get involved. Take and share lots of pictures or write a feature for a local or school newsletter to raise the profile of the club. This will positively reinforce group members and give them affirmation for what they have achieved. Sharing your successes can also help drive recruitment for new members and attract funding and staffing support.



# 10

### HAVE FUN AND ENJOY YOURSELF

Your passion and enthusiasm will rub off on your group and ensure they have positive experiences. Join in with the activities and enjoy exploring and discovering STEM alongside your group. If you are making the time to run the club, it should be something you enjoy doing yourself. Not only will you develop your own skills, but you will create strong relationships with your group members, making it a hugely rewarding experience, in many different ways.

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### EXPLORE MORE

To find out more about Science Museum Group Learning, including resources to use in informal learning experiences, at home and in the classroom; training opportunities; and insights and research around STEM engagement, visit: [learning.sciencemuseumgroup.org.uk](https://learning.sciencemuseumgroup.org.uk)

For further information, contact us at: [SMGAcademy@sciencemuseum.ac.uk](mailto:SMGAcademy@sciencemuseum.ac.uk)

Please write 'Top Tips: Running Exploration and Discovery STEM Clubs' in your email subject line.