

“Thought of having a Science Fair at your school, but not sure how to go about running one?”

The next few pages will answer some of the questions you might consider when planning your own Science Fair. They are full of practical advice about organisation, resources, checklists and links that can help take some of the hard work out of organising a Science Fair, and help you to make the most out of your event.

The material has been written by practising colleagues who have experience of running science fairs in the past.

Why do you want to hold a Science Fair?

- n Do you want to celebrate Science Year in your school?
- n Do you want to raise the profile of science amongst children, parents and staff?
- n Do you want to show children’s progress in science through your school?

If the answer to any of these questions is yes, then a Science Fair is a good way of achieving those aims

Some schools hold Science Fairs as part of larger national events, such as Science Year or National Science Week. For other schools it is part of their curriculum development in science, raising the profile of science in the school and demonstrating progress to children, parents and staff. It may even be as part of a revision programme for National tests or part of timetabled science teaching.

- n Whatever the reason the primary aim is often the same:

To raise awareness and knowledge of science in an interesting and active way.

Who is going to be involved in your school?

You could run a Science Fair for the whole school, a single class or even a specific group of children. This will depend on the reason for holding the Science Fair, resources, staffing and space within school.

We have provided forty printable activity cards, complete with teachers’ notes and resource lists, and ideas that will help you to run a Science Fair for the whole school, right from the Foundation Stage to Year 6.

Opening the Science Fair up to a single year group or a number of year groups allows you to get as much as you can out of the event. It is often easier to run an event for a whole class as the class wouldn’t need to be split or another teacher found for the rest of the class.

How long do you want your Science Fair to last?

Depending on the size of your school, the numbers of children involved and available space you could hold the event over a week, two days, a single day, a morning or an afternoon. If you want to involve the whole school, a longer time would probably be more effective, so that the children have enough time to get involved in each activity. If it is just Years 5 and 6 that will be involved then you might consider a single day as being more suitable. We have provided a number of timetables for different options in the resources section. These can be modified for your school, as circumstances differ between schools.

There are a number of pros and cons for each of the time frames we have suggested:

Holding the Science Fair over a morning or an afternoon means that there will be less impact on other events in school. However, it will mean that only a single year group or class would be able to participate.

Extending the Science Fair over more than one day means that more children can be involved and the activities will not be rushed, but whether this is possible will depend on individual circumstances. On the other hand it may mean that the activities have to be cleared away and set up again if the space is used for different purposes. If a space, such as the school hall, is used it may affect assemblies and activities, such as PE or lunch time.

- n It is a good idea to give yourself some time at the beginning of each session to set up the activities without the children there.
- n Whatever you decide about the length of your Science Fair; bear in mind your aims for the event.

How are children going to be involved in your Science Fair?

There are different ways of involving the children in a Science Fair, and what you decide will depend on your aims for the event. One way is for the children just to be involved in the activities and recording their results on the day.

In the resources section you will find teachers notes (with a list of resources) and activity cards for forty activities from Foundation to Year 6. However, you may want the children to think more about the science they have learned by using an activity to prepare for their work during the Science Fair or to continue it afterwards.

One way of doing this and involving the children more is for them to research a scientific topic and produce a display for the Science Fair, or as the follow up from it. This would probably help the children to think more about what they have learned, but it involves more organisation.

Your aims for the Science Fair will help you to decide which type of Science Fair you would like to run?

Like the sound of a Science Fair and want to know what to do next?

The first thing that you will need to do is to talk to your Head Teacher or Senior Management Team to check that a Science Fair will fit in with the school's priorities. If you decide to hold a Science Fair then you will need to set a date for the event.

Don't underestimate how long it can take to organise these things. You know what schools can be like. If you want to involve outside agencies, e.g. planetariums or science theatre companies, then you might need to book these a long way in advance.

Do you want your Science Fair to have a theme?

You may want to follow a particular theme in your Science Fair to give the event some continuity or to fit in with a theme that is being followed at school. On the other hand you may decide that a theme would be too limiting and you want your children to experience a wider range of activities.

The activities in the resources section are labelled so that they can be used either as part of a theme. Alternatively, activities from different themes can be used together giving children a broader experience of different areas of science.

How much will it cost to organise?

The cost of your Science Fair will depend on what you decide to include and how many children are involved, so it's impossible to give a definite figure. The following is a list of some of the expenses that you may need to consider:

- n Supply cover for the science co-ordinator – this is very useful for them to organise the activities and also to support other staff and children during the event.
- n Additional resources – you may find that you have many of the resources we have suggested for the activities already in school. However, there may be some extra resources that you need, so it is important to think about the cost of these.
- n Visiting speakers, theatre companies, planetariums.

Can you get sponsorship or a grant, and how?

Depending on the size of your budget, you might want to, or indeed have to, consider sponsorship. If you are considering sponsorship the following advice will help you in this process by raising and answering some of the questions you will need to think about.

Who might you ask?

- n Parents, governors who own or run companies.
- n Local businesses with a product that is relevant to your Science Fair topic or theme.

- n National companies with an interest in education (these will probably employ a full time education officer).
- n National charitable organisations.
- n SETPOINT.

The approach needs to be done formally on school notepaper. Make sure that the recipient knows exactly how much you are asking for and exactly what the money will be spent on. Also spell out what the sponsor will get in return for the money (newspaper publicity, a mention on the school website etc).

How do you find out?

- n By asking around within the school community
- n By asking your LEA science inspector for contacts
- n By asking for advice from your local Education and Business Partnership office (via the LEA)
- n By contacting your British Association regional office (via BA website) for help and advice.

Is anybody out there...?

Many organisations and businesses will give an input to your Science Fair. These include:

- n Theatre companies with a science theme.
- n Actors in role as famous scientists.
- n Zoo education departments.
- n Local wild life or farm centres.
- n Craftspeople e.g. dyers and weavers.
- n Meteorologists and astronomers.
- n Local companies with a science related product.
- n Further or higher education institutions, and universities.

They will provide you with a wide range of talks and activities, such as:

- n Bringing and talking about domestic animals or more exotic species of wild-life.
- n Interactive plays.
- n An insight into how discoveries were made or ideas evolved.
- n Showing how different animals are suited to their natural habitats.
- n Introducing the children to astronomy through experiencing a planetarium.
- n Talks, demonstrations and expert help for children in their own activities.
- n How what they are learning is applied in 'real life'.

Many of them are commercial organisations and will charge accordingly. Make sure that whoever you invite is briefed thoroughly and understands:

- n The purpose of the Science Fair, and their part in it.
- n The age of the children involved.
- n What you are hoping the children will gain from their session.
- n The level of language that is most appropriate for your children.

Who is out there that can give an input, and will they charge?

There are a number of people and organisations that could contribute to your Science Fair. Some of them offer free support, such as your local Higher Education and ITT institutions, and local companies involved in science or engineering. Do not forget parents. Others, such as visiting speakers or theatre companies, may charge for their input.

Many secondary schools and FE colleges have community service initiatives that may be of use. There could be an opportunity of working with your local secondary school on Science Bridging Units designed to aid pupils' transition between primary and secondary schools.

The resources section contains a list of contacts that you may find useful.

How will you involve and motivate other staff in your school?

Class teachers and learning/classroom support assistants taking part in the Science Fair will be able to see new ideas for practical activities and the way that investigative science can motivate children. If it is possible for the science co-ordinator to be released during the fair they can be available to answer questions and give advice and support to colleagues and children.

Approaching the Science Fair in this way can help to raise the profile of science amongst staff in your school and provide ideas for investigative science activities that can be used in the classroom.

In the resources section is an amendable agenda that may be useful when discussing the Science Fair at a staff meeting.

What publicity will you need and how will you get it?

Any publicity prior to the event depends on the audience that the fair is aimed at. This is most likely to be the children and the parents, but you may want to open it out to the local community, so you may want to consider putting up posters.

A Science Fair can also be a good way of creating publicity for the school. Contacting your local newspaper before the event could be very fruitful, as they may be interested in taking photographs and interviewing children. You may also want to contact your local radio and television stations.

In the resources section we have included an example of a letter that can be sent to the local media. This can be amended to suit your event.

What role will the parents play?

Inviting parents to come to your Science Fair can be a very productive way of raising the profile of science in school, as it will encourage parents to talk about science with their children. It will also give them the opportunity to see how science is taught in the school.

Those that come to the event could take part in the activities with the children or just observe what the children are doing. This can sound daunting but many parents comment on how much they have enjoyed the day and what they have learnt. They are often amazed at the level of science that children in primary school are learning.

In the resources section we have included an example letter informing parents about the Science Fair and inviting them to come along. This can be amended so it is appropriate to your school and event.

What to do just before and on the day

Before the day, make sure you have got all the resources you will need and all consent forms have been returned.

On the day you may want to enlist some help in setting up the activities before the children come into the event. It is not a good idea to start the event right at the beginning of a morning or afternoon session, as you need enough time to set up.

This is particularly important if you have had to clear away all the activities over a dinner time or over night.

Remember any Health and Safety precautions you need to consider.

See *Be Safe! ASE Publications* for guidance on Health and Safety precautions.

For the 7-11 activities the children are best organised into pairs before they come to the event and it is a good idea if they bring a pencil with them.

When the children first come into the event, you will need to spend a few minutes talking to them about the activities, expectations and organisation. If you have set the activities up on tables around the outside of the space, then sitting the children in the middle will allow you to walk round talking about the activities that you feel need some explanation or demonstration. The activities are designed for the children to use as independently as possible.

During the Science Fair you can move round the activities talking to children, using the key questions to extend their thinking or to clear up any misconceptions.

At the end of the Science Fair it is a good idea to bring the children together to look at some of the recording they have done and to review what they have learnt.



Certificate for Superb Science

This certificate is awarded to:

For taking part in our Science Fair at:

Signed: _____ Date: _____