

TRIATHLON

Communication Project
For Teachers **p2&3**, for Students **p4**

HEALTH AND SAFETY

Students should be encouraged to make their own risk assessment before they carry out any activity, including surveys. In all circumstances this must be checked by a competent person.

For surveys and other activities on open water, the PE department or local water sports clubs may be able to help with risk assessments and ways to avoid risks. Students using specialised equipment should be supervised at all times.

Students may want to set up unorthodox experiments and you may need to seek specialist advice. In particular:

- Any investigations into the actual effect on real people of immersion in cool or cold water must only be done with medical supervision and appropriate medical resources on hand in case of emergency
- Any activity associated with open water will require specialised risk assessment.

Organisations such as CLEAPSS are able to help.

TRIATHLON:

Silver Communication Project - For Teachers



On your bike

A triathlon consists of a 1500m swim in open water, followed by a 40km cycle ride, then a 10km run. World class athletes complete it in less than two hours.

Obviously, triathletes have to be super fit. But what difference does their kit make?

Take the cycling stage, for example. Bikes vary in many ways, and cyclists ride their bikes differently – using gears to turn the pedals fast or slow. So, why do bikes vary so much in style and price, and how does a triathlete choose the right one?

HAVE YOU EVER WONDERED?

...if you could help someone choose the right bike for them?

You might like to imagine yourself in a situation such as...

People cycle for many reasons, both on-road and off-road. The wrong type of bike can make cycling difficult or uncomfortable, too slow for racing or too unsafe for the roads. You work in a cycle shop. Customers frequently ask for advice about which bike they should buy.

You need to gather information, then **use your communication skills** to:

- help customers understand why some bikes would not be suitable for their needs
- explain the advantages of the most suitable bikes.

Prompts

The **Student Brief** gives some triggers to start students thinking. They should realise that each trigger has various implications. Encourage students to identify these themselves. However, if necessary, prompts such as those below might be given, to point students in suitable directions.

- The nature of your target audience, and how to make an impact on them
 - What type of audience would test your communication skills?

- What sort of arguments would you need for these sceptical audiences?
 - convincing a customer that the cheapest / most expensive / best-looking bike is not always the most suitable for their needs
 - convincing a customer that, if they have changed the type of cycling that they do, they may need a different type of bike from the type they had before
 - persuading a child that their parents' favourite model should also be their own.

Prompts (Continued)

■ Using mainly spoken and visual communication, but being prepared to include diagrams or practical demonstrations, if appropriate

- What are the alternatives to simple 'sales talk' conventional presentations

Have you thought about:

- developing a PowerPoint presentation or video about different types of bike
- role playing; for instance, a discussion between a cycle shop sales assistant, a customer who wants a particular type of bike
- producing a customer questionnaire to help identify essential and desirable features of a bike, from their point of view

■ How can you present information and numerical data in an interesting way

■ Ensuring that you present scientific, practical and economic information, rather than emotive arguments

- Can you backup your statements with facts?
- Would a testimony about a particular bike from a satisfied customer be appropriate and/or acceptable?

■ Using correct scientific language and terminology

- Why may your arguments be invalid, if terminology is incorrect, unclear or ambiguous?
- How would you clearly explain technical terms

■ The reliability of your information sources

- How reliable is the information from the bicycle manufacturers?
- How many sources corroborate the evidence?

■ What are the possible counter-arguments that customers may have? How will you be in a position to respond to these arguments?

Suggestions for supporting students

Communicators should spend the majority of their time working on how to deliver their message, rather than information seeking.

It is recommended that, wherever possible, Silver Award students should have a scientist or engineer as Mentor for their project. Please contact your CREST Local Coordinator to discuss mentoring.

■ academic or industrial research info, for instance:

- properties of materials or structures
- human powered vehicles
- sports science

■ scientific publishing

■ technical sales

■ sports or leisure cycling

Discuss with students how they will manage their time (after school clubs, working during lunch hours, homework). Agree a completion date with the students.

■ Students should decide their focus, although this may alter in the light of experience as the project progresses



POSSIBLE EQUIPMENT, MATERIALS AND RESOURCES

These will depend on the presentation format(s) chosen by the student. They might include:

- digital camera and access to photo-manipulation software
- video camera and editing facilities
- PowerPoint software
- drama performance area
- access to someone skilled in preparing and delivering presentations
- an audience for a dress rehearsal
- an independent audience to whom to present their project
- examples of different bicycles and/or bicycle components, such as pedals, saddles, handlebars
- facilities for practising practical demonstrations

Internet search

Combine 'bicycle' with terms such as: triathlon, type, cycling, equipment, trial, sports, leisure, safety, mountain or design. Or try:

■ Introduction to types of bicycle and their uses
en.wikipedia.org/wiki/Bicycle#Uses

■ Introduction to mountain biking
mountainbike.about.com/od/howtogetstarted/u/mtb_basics.htm

■ Problems with getting the correct design of frame
youtube.com/watch?v=sD7rq568Nvw and
youtube.com/watch?v=dSY6rYVs2QU&feature=related

■ Introduction to how the different features of a bike work
howstuffworks.com/bicycle.htm
with links to pages containing more detail

■ Choosing a triathlon bike
ehow.com/video_2354736_choosing-triathlon-bike.html
but containing pointers to things to look for when choosing any bicycle



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they should buy. You need to gather information, then **use your communication skills** to:

- help customers understand why some bikes would not be suitable for their needs
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Some things to think about...

- The nature of your target audience
- Be prepared to including diagrams or practical demonstrations
- How to be persuasive as well as informative
- Ensuring that you present scientific, practical and economic information, rather than emotive arguments
- Using correct scientific language and terminology
- the reliability of your information sources
- Who will advise you on presentation skills?

Health and Safety

Should you decide to carry out any experiment or practical activity:

- (a) find out if any of the substances, equipment or procedures are hazardous
- (b) assess the risks (think about what could go wrong and how serious it might be)
- (c) decide what you need to do to reduce any risks (such as wearing personal protective equipment, knowing how to deal with emergencies and so on)
- (d) make sure your teacher agrees with your plan and risk assessment

NOTE: Your teacher will check your risk assessment against that of your school or LEA. If no risk assessment exists for the activity, your teacher may need to obtain special advice. This may take some time.

- (e) if special tools or machines are needed, arrange to use them in a properly supervised D&T workshop.