Practical activities in a bubble

From September 2020, we're finally returning, as far as possible, to life as usual. One where schools deliver a broad, balanced and full curriculum. For practical subjects like science, D&T, and art, this means getting back to doing hands-on activities, investigations and enquiries. Using equipment is allowed because it's essential for delivering the curriculum and to support learning in practical subjects.

Planning and delivery of activities will continue to be different but much closer to normal. Thankfully, there isn't a single set of rules that have to be slavishly followed. Instead there are guidelines that give you the freedom to structure your lessons in such a way that you are not forced to limit the learning of your children.

Taking a pragmatic approach to managing safety

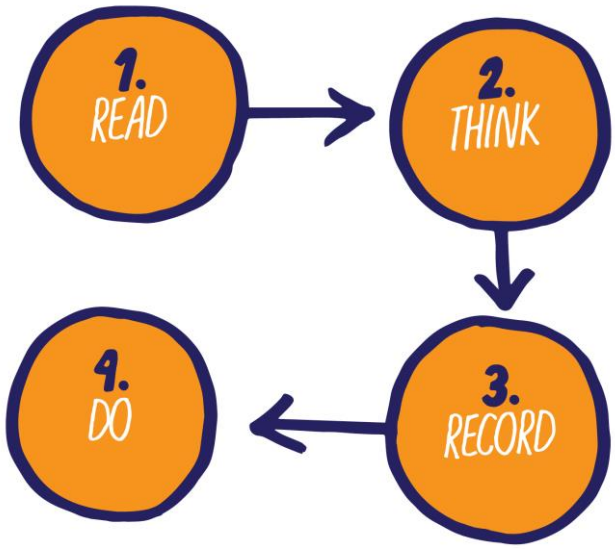
For all practical activities, part of your planning is your risk assessment; 'I need to teach my children this, using this activity. What is the safest way to do this? What do I need to do for this to happen?' None of this process has changed, you will still think about:

- your children's intended learning
- the activity you want them to do to support this learning
- the number of children undertaking the activity
- their behaviour
- the complexity of the activity
- the size/layout of your classroom
- the resources you have available

There are now a few extra 'COVID-19' related measures you need to consider when planning (see the COVID-19 risk assessment safety ladder on Pg 2).

As always:

1. Read - CLEAPSS guidance to find out the hazards and safety measures you need to implement in order to reduce the risks during an activity.
2. Think - about your class and decide on the safety measures you will use to keep you and your children safe during the activity. Include any additional 'COVID-19' measures to help reduce the risk of transmission of the virus. (See Pg 2 for more information)
3. Record - the measures in a place/way that helps you to remember to do them.
4. Do - make sure your safety measures are carried out.



CLEAPSS' standard advice and guidance about keeping activities safe still applies (see **EXPLORE Issue 5** pgs 4-5). Undertaking different practical lessons will mean implementing different, standard and COVID-19, safety measures. No two lessons will be identical, this is perfectly acceptable.

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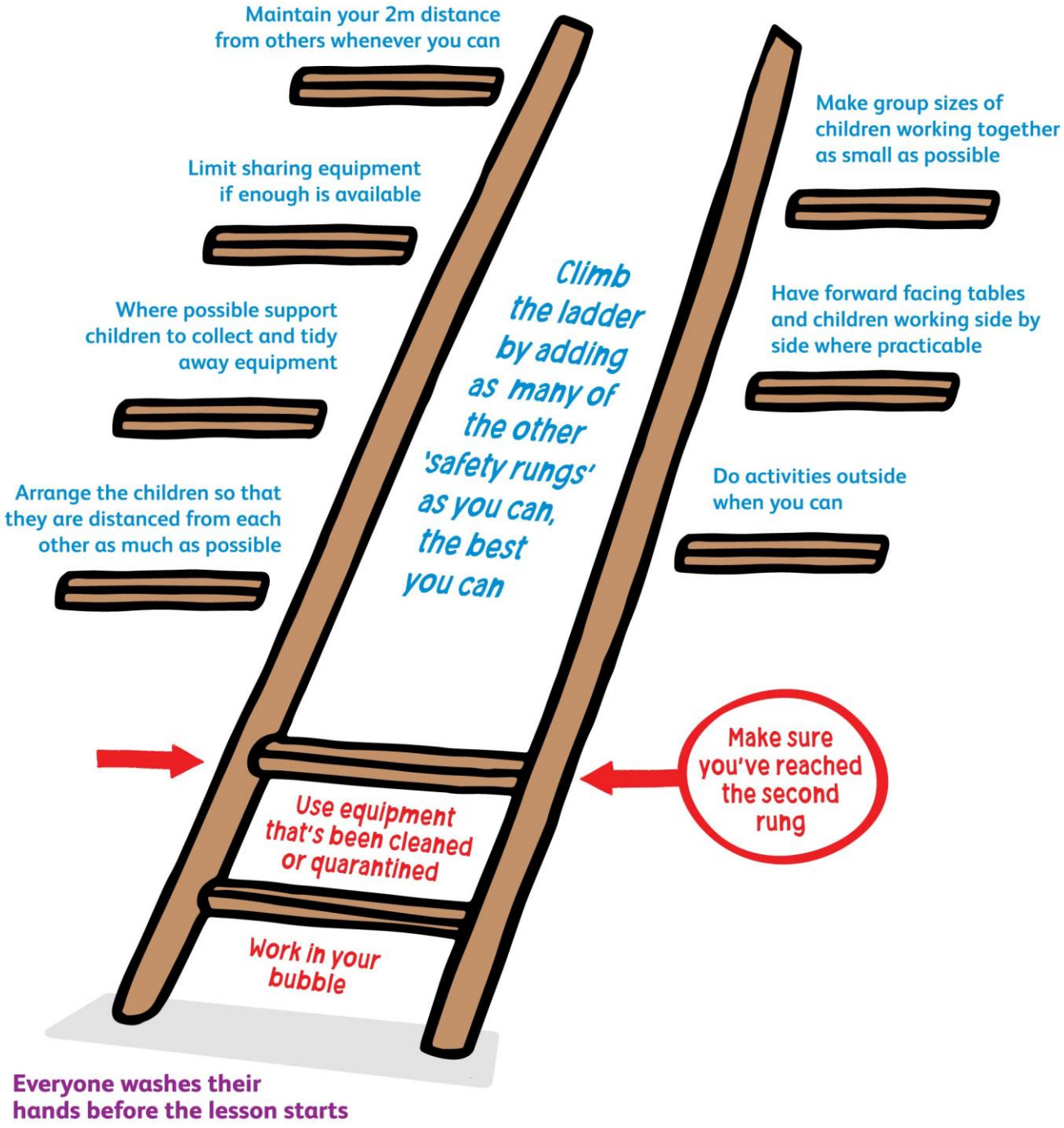
The COVID-19 risk assessment safety ladder

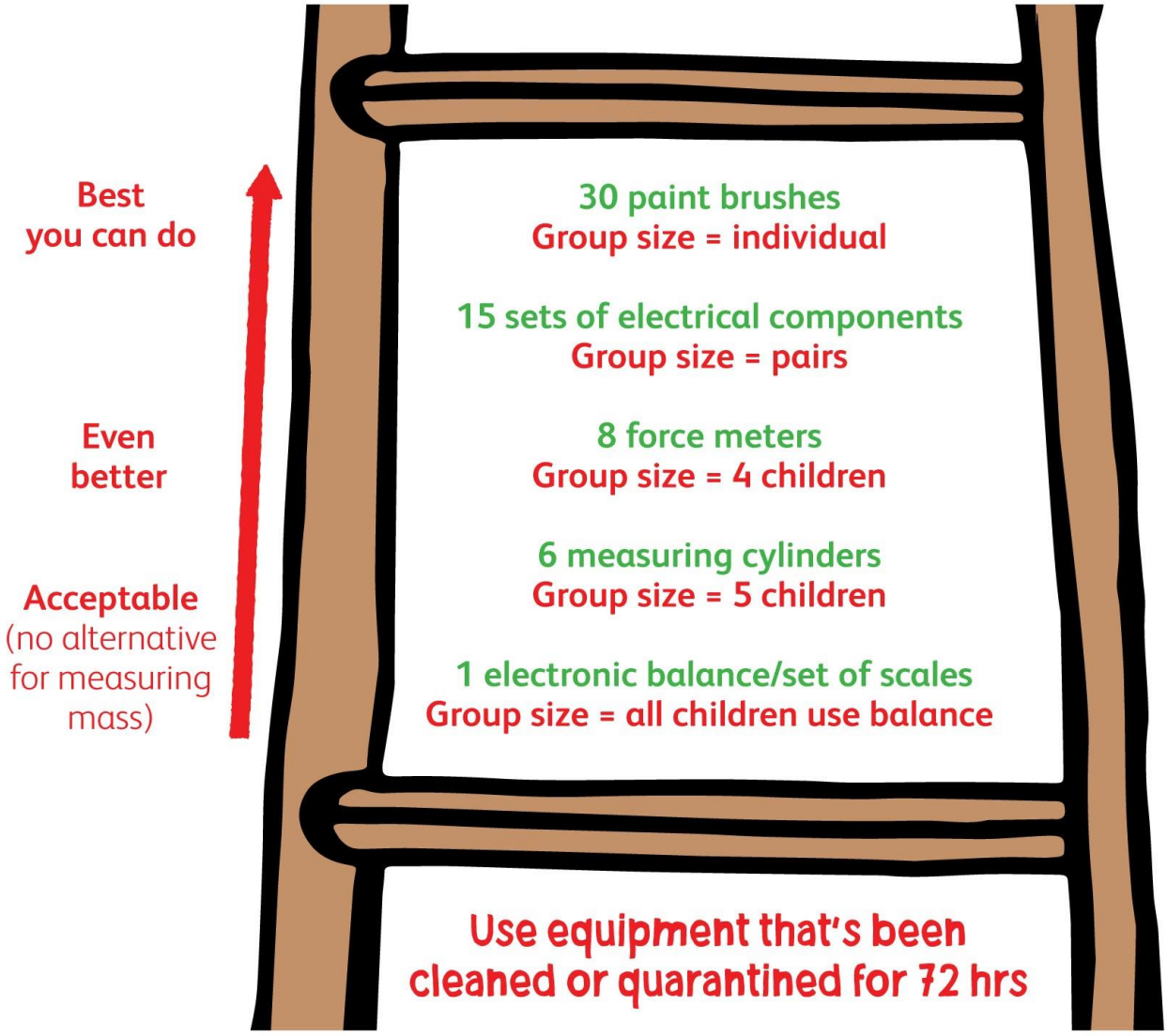
We've represented the government's suggested safety measures to reduce the risk of transmission of the virus using 'The COVID-19 risk assessment safety ladder'. The statements (the rungs) are not an 'all or nothing' check list; apply as many as you can. Implementing any of the options, even partially, will benefit you and your children. The more safety measures you can put in place, the further up the ladder you get. Aim to get as far up the ladder as you can without compromising learning.



It's really important to get two feet firmly on the second rung of the ladder as rung 1 & 2 represent the fundamental safety measures you must have in place. Beyond rung 2 it's more of a balancing act, where you select the most appropriate 'rungs' for your circumstances and activity. This is where your best judgment comes sharply in to focus. The trick is to minimise the number of contacts a child/teacher has, by considering things like the learning intention, your choice of supporting activity and the equipment you have available.

Equipment

Practical activities are most often carried out in groups. How much equipment you have available is the major factor which will determine group size in most practical lessons. Try to minimise group sizes, bearing in mind that this might not always be possible. Remember that learning does not need to be compromised in an attempt to maintain 'in-bubble' distancing. Instead do what you can with what you have. For example based on a class of 30, if you have:



Where possible, use disposable equipment, available from the supermarket, that children can place in the appropriate waste at the end of the lesson. For example, as used in our: **Light up cards, Glue from milk**, **Bath bombs** or **Making trace fossils** activities.

If using *Playdoh*, we recommend that you make it, use it, and then bin it after the activity as there is no evidence to support leaving it for 72 hrs will render it safe to reuse.

Demonstrations have their place but are a poor substitute for hands-on learning and diminish the learning experience so drastically that they do not feature here. In line with 'getting back to normal' the COVID-19 risk assessment safety ladder makes it possible for children to do hands-on activities.

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Other things that help you climb the ladder

- Organise the children so that each member of a group doesn't need to touch the same piece of equipment repeatedly; try assigning one child to assemble the equipment, one to take readings, another to record etc (these roles can be swapped during the next lesson).
- Think about what skills the children will use during the activity and who will require support. Group children that can help each other eg pair a child that can measure length well with one that is still working on this skill.
- Activities that require troubleshooting, adult intervention or replacement equipment (like electrical circuits) will require more planning but doing so will help you maintain your 2m distance. Support for these activities might include:
    - Safety messages and instructions clearly communicated in text, pictures and verbally. Include examples of things they should not do, like making a short circuit.
    - Use data projectors and digital cameras/visualizers to demonstrate how to overcome tricky parts of an activity, like opening and attaching crocodile clips. Practice what you will say and do as part of your planning.
    - Clear and concise instructions and large visual aids.
    - Highlighting common problems so that children do not fall foul of them, like showing them how to self-diagnose faults in a circuit.
    - Giving more equipment than they'd normally need, like extra light bulbs/batteries (if available).
- Place equipment at different points around the classroom for orchestrated collection by the children. Alternatively, setup equipment in trays for each individual, pair or group.

Spillages

Additional planning will be required for activities that might result in spills. Working in a tray will help to contain small spills. For water-based activities like our **Overflow** activity, children will need to have paper towels and be taught how to clear up a spill should it occur. You need to ensure you have a plan for what to do in the case of a large spill, and what the children need to do.

Clearing up

The extent to which your children are able to help will depend on their age and ability to tidy, clean and follow instructions. Bear in mind, tables may need wiping, so plan who will do it and the time it will take. Support older children to clear up their own workspace, provide extra paper towels and show them what to do. The more they can do for themselves the higher up the ladder you go.

Additional risk assessment factors to consider

- Avoid any activities where there is a high risk of transmission of the virus, for example, activities that involve blowing eg blowing across bottles for sound activities or blowing straws must not take place. Contact CLEAPSS if you are unsure, or if you cannot find an alternative activity.
- Read the yellow safety box on our activities when planning as this will make it clear if there's a high risk where you (the teacher) may have to intervene, like in our Investigating burning activity. Consider your personal circumstances. If you are in a high-risk category don't do an activity where you know you are likely to have to break your social distance with your children. This is an example where the amount of learning gained doesn't outweigh the risk.
- If an accident or incident occurs, follow your school's guidance, which may have changed due to the current situation. You will need to talk to your children about what to do if an accident happens during this new way of working. What you say will change depending on the activity.
- Gather together any equipment before the lesson. Check it has been cleaned or quarantined for 72 hrs. At the end of the lesson, an adult must carry out any cleaning of equipment or move the equipment to an area to be quarantined.

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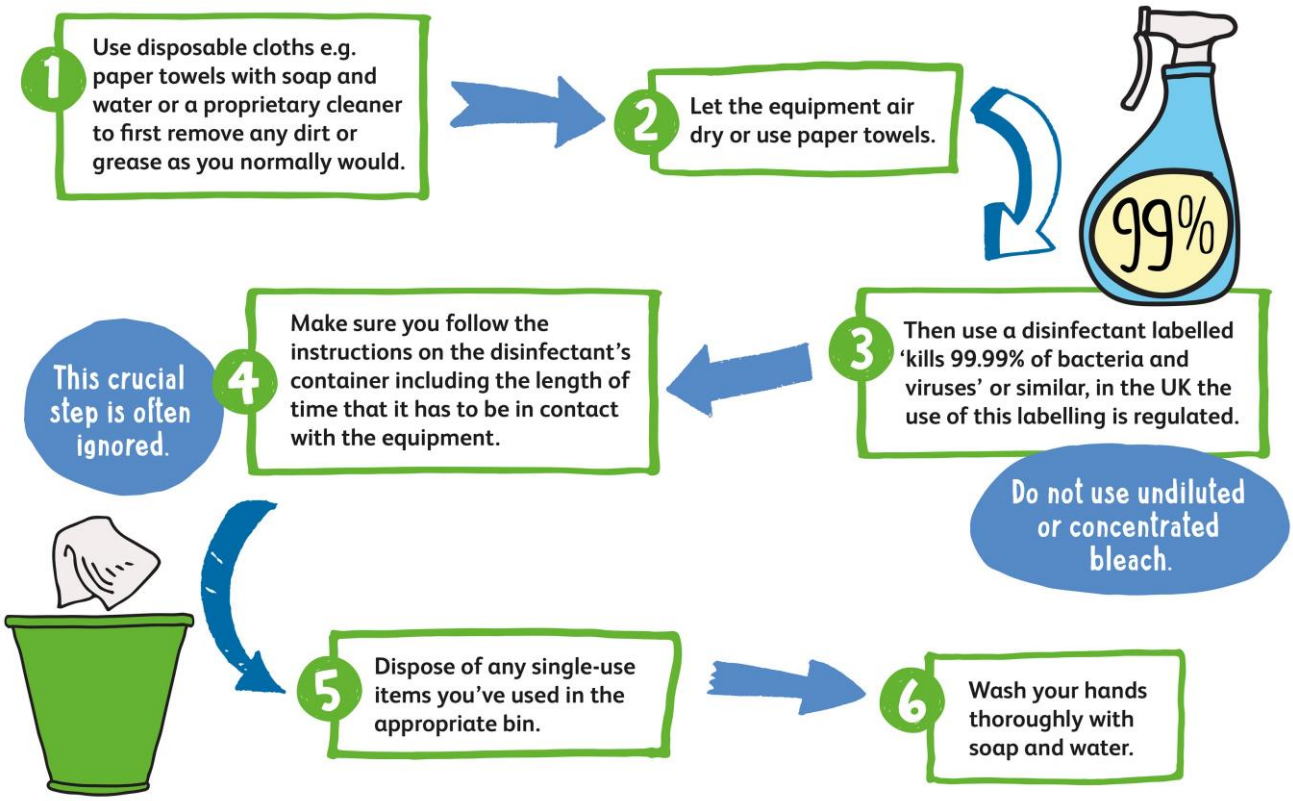
Cleaning equipment used during a practical activity

Government guidance makes it clear that resources can be shared between bubbles but must be cleaned or quarantined before this can happen. Follow your employer's cleaning protocol.

There's strong evidence that after 72 hours most surfaces are 'COVID free'. Since most science equipment utilises plastic or metal in some form, we recommend primary schools follow the quarantine for 72hr rule for equipment, rather than 48hrs also mentioned in government guidance.



Will our science, D&T and art equipment be free of microbes (including COVID-19) if we clean it?

Probably not. Primary schools do not have the equipment or training needed to sterilise anything. You can't disinfect everything, and, even if you did, it won't stay that way. The best you can do is to temporarily reduce the number of microbes (including coronavirus) on any item of equipment.

Can the children help?

If your children are used to washing up when doing activities like food technology, then there's no reason why they shouldn't wipe and dry other equipment they've used. As with all activities you need to assess the risks posed by the children and the activity or equipment. For example, you may decide to not let Y4 children wipe over crocodile clips. Do not let any children use disinfectants.

Children, especially older children, can also help by being mindful when they use equipment. If they wash their hands before an activity and keep their hands away from their faces during the activity, it's likely that the equipment will remain cleaner and easier to disinfect afterwards.

Do I need to use personal protective equipment (PPE)?

Not as a way of protecting yourself from the virus while cleaning equipment. Bear in mind that you are already in the environment. Touching, for example, some magnets that the children have used is no different from touching the door handle.

The cleaning product you use may require you to use PPE (very unlikely with shop-bought proprietary products) but this would be to protect you from it, not COVID-19. Follow the instructions on the label.

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Bringing items in from home

Practical activities often use household items brought in by the children. This is, once again, allowed providing cardboard is quarantined for 48hrs and plastic items for 72hrs. Provide storage bins at the door of the classroom to collect the items and then leave them out of reach for the required period.

We're here to help

There is always something practical you can do to support learning and if you can't think of something, you can contact us at CLEAPSS.

Like everyone, CLEAPSS' understanding about the virus, and how to manage its spread, is evolving. We will continue to revise this guidance as we learn more, or if new, or revised, government guidance is published. Check our website and Twitter feed regularly for updates.

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