

Excavating a Test Pit **YOU MUST NOT EXCAVATE ON ANY LAND WITHOUT PERMISSION OF THE LANDOWNER.** (It's probably a good idea to ask your parents first, before you dig up the garden!!!)

A test pit is a quite small trench, just to see what's down there. (1 metre x 1 metre should do to start with.)

It needs to be dug and recorded properly, like that of a professional archaeologist. That means that any discoveries you make will help research into what happened historically in your bit of the countryside.

It needs to be dug in a series of small layers, (called context layers), of about 5 or 10cm at a time.

1. Fill in your trench recording form.

Archaeological Context Sheet		Date:	
Area:	GPS:	Parish:	Sheet No:
Environment:		Height above Sea Level:	
Vegetation:		Land use:	
Soil Type: (See Soil Sample sheet)			

2. The next thing you need to do is measure out a right-angled square, on the ground, with each side measuring exactly one metre long, (or as long as you need to make it. DON'T make it too big!). To do this you'll need some string, four large nails, a sheet of A4 paper and a tape measure.

- A) Push a nail into the ground. Tie some string to it. Measure a metre along the ground and push in another nail. Connect the two nails with the string.
- B) You can make sure your pit has right angles by using a piece of paper to ensure that your corners are square. Push in the next two nails and connect them with the string. You now have your pit marked out.
- C) Check that your pit is square by measuring the diagonals. If they measure the same, your pit is good to go! Mark the corners 1,2,3 and 4. (1 and 2 face north.)

Of course, you could do it as archaeologists do.

Archaeologists use a 3 x 4 x 5 triangle to make sure they have a right angle.

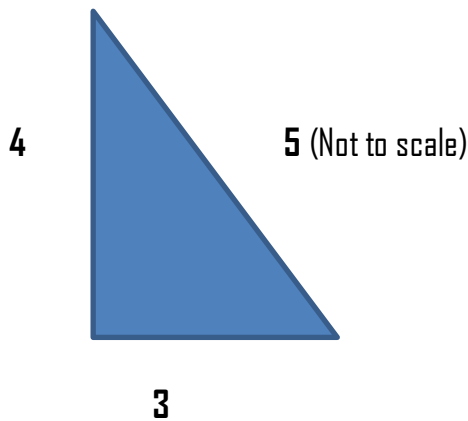
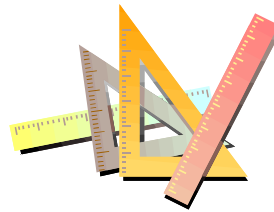
If you draw two lines – 3cm and 4cm on squared paper, you should be able to join them up to find that the other line is exactly 5cm.

Work out the squares of both short sides: $3 \times 3 = 9$

$4 \times 4 = 16$. Add them together and they come to 25

$5 \times 5 = 25$ to! (Look at the diagram.) So $3^2 + 4^2 = 5^2$

'The square on the hypotenuse is equal to the sum of the squares on the other two sides.'



TEACHERS: Here's a thought. Why not excavate a small area of the school field? As you back-fill it, place in different layers, some 'artefacts' - even if they're plastic - for future year-groups to 'find' when they re-dig it?

Archaeologists measure and mark out a 3 x 4 line and adjust it until the hypotenuse is exactly 5. That way they know they have a right angle.

3. Draw yourself a simple location map onto squared paper.

A) Look for something permanent near to your pit. It might be a wall a fence or just a big tree.

B) Now do the same with another object – your head teacher for instance! Draw it onto your squared paper.

C) Measure the distance between them. Draw a line between them on your paper. This is your baseline.

D) Measure the shortest distance between your pit and the baseline and draw your pit onto the sketch map. Use a compass to show you where north is. Draw it onto your map.

E) Draw in anything that you think might be interesting on the ground near to your pit and the baseline. You never know what they might be, or how they'll fit in.



4. Lay some plastic sheeting on the ground. Lay it at least a couple of metres from your pit. This is where you will put your 'spoil' that you dig up. It just stops the spoil from making a mess of the grass, and gives you space to work.

5. Recording your context layers.

- A) Before you start to dig, it's useful to fill out a first context record for the surface – so that you know what was there to start with. If it's just the grass on the school field, just make a note of that.
- B) You'll be scraping off just a small amount of earth at a time – 5 or 10 cm. Draw a *context map* for every *context level*. Your first one will be Context Level 1 and so on.

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

6. De-turfing. Now you can start to dig! You'll need to gently lift off the first layer of turf.

- A) Use a spade and carefully cut the surface. Now try to get underneath the turf and lift. A friend can now grip the turf and gently peel it off. Store the turf nearby. Put grass layers together as shown. (It keeps it fresher.)
- B) Look under the turf and record what you see.

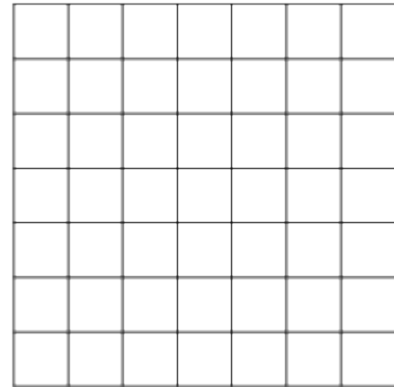


grass
soil
soil
grass

7. **Context plan drawing.** A) For this, you'll need to make yourself a grid. An adult might help you. It will need to be 1 metre square on the inside edges. String it with squares of 10cm x 10cm.

B) Now lay it over your trench. Draw onto a new Context Record sheet exactly what you see on the ground. Each 10cm square on the ground will be 1cm on your sheet.

C) You could use a key to mark things in, like the one below.



Soil	Shells	
Gravel		Pottery	
Bricks		Bone	
Stone		Metal	
Tile		Glass	
Plaster		Mortar	

Of course, you could make up your own symbols.

Don't forget to **take a photograph** of the surface of the test pit before you start digging the next context layer.

8. **Your finds tray.** A) Use an 'finds' into it. (Finds are anything bones will often crumble, but
B) Put your new finds into a permanent marker pen, the pit know where it came from.



empty tray and line it with newspaper. Put any man-made, or things like shells and bones. (Old teeth can survive in the soil for many years!) plastic sandwich bag. Write on with a number and context number, so that you

9. **Digging the next layer.**

A) *Neatly* draw in the first context layer.

B) Now carefully scrape off the next context layer. Use your trowel, unless the soil is very hard.

C) Keep the floor of the pit as level as you can. Keep checking the



depth. Don't go too far.

- D) Dig *around* large stones, etc. unless they are just lying on the next surface. Don't dig out anything that is embedded. It might belong to the next context layer.
- E) Anything that is still embedded when you reach the next layer should be recorded on another context sheet.
- F) If you hit a wall or a floor, that might be it for this excavation. If you can dig around it, then it will be useful to see what else is down there. You might find a '*facing wall*'.
- G) Keep on digging context layers until you hit the '*natural*'. This is just the layer of soil that has not been disturbed by people.
Draw your final context recording sheet.



10. Storing the spoil. While you've been digging, you should have stored the spoil on your plastic sheet. (Remember to take it out carefully, in case there is something there you haven't spotted, and being careful not damage the next layer.) You could sieve the soil, if it is crumbly.

11. 'Processing' your finds.

- A) You should clean your finds carefully and store them in a tray to dry. *Make sure you don't mix up finds from different context layers!*
- B) Don't wash anything that looks fragile. Just brush them gently with a soft paint brush.
- C) Don't wash metal finds. Keep them as dry as you can. Don't wash bone, cloth or wood.
- D) *Gently* wash pottery. For bits of hard material, water and an old toothbrush are useful.
- E) Don't scrub things!
- F) Record all of your finds. Take photos.
- G) Once everything is dry, store it carefully, in labelled bags. (Your local history/archaeological group should be able to help you date your finds.) **Portable Antiquities Scheme:** <http://finds.org.uk/>



12. Backfilling your pit.

- A) Replace any large stones or bricks into your pit.
- B) Shovel all of the soil back in and level it off. Tread it down gently.
- C) Now replace the turf as best you can. Fill in some of the cracks with a little spare soil.
- D) Make sure you've left the pit neat and tidy!

13. Cleaning your tools.

- A) Clean all of your tools carefully. Scrape off mud and soil. Dry them off.
- B) Enjoy your finds!

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