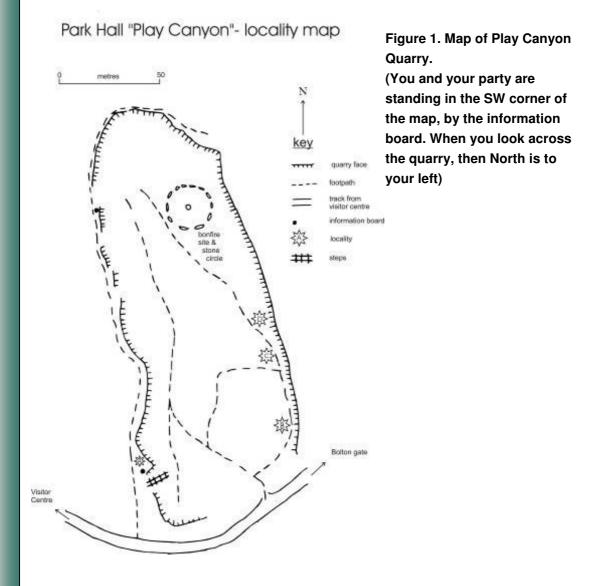
# PARK HALL COUNTRY PARK: KS2 ACTIVITY ANSWER SHEET

#### First Activity ANSWER SHEET

Site A - Setting the Scene at Triassic Park Hall.

- 1. Turn your map in the same direction as the quarry.
- 2. Use a compass to find north. (See Figure 1.)
- 3. Mark north, south, east and west on the compass at the top of the map.
- 4. Look eastwards at the old quarry faces which have been cut through the rocks.



From what you have seen all around you, you should be able to recognise two kinds of rock in Park Hall.

In the east face, what rock is on top?	Sandstone
What colour is it?	Red
What is it mainly made of?	Sand
What rock is at the bottom of the face?	Pebble beds[conglomerate]
What is it mainly made of?	Pebbles[& some sand]
Which is the younger rock?	Sandstone
Which is the older rock?	Pebble beds[conglomerate]

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### Second Activity ANSWER SHEET Site B - Looking at Triassic Sandstones.

1. Which of these words would you use to best describe how the rocks look from a distance:

All jumbled up or mostly layered?	Mostly layered[The pebble beds may look
	jumbled up at first]

2. Now that we are closer to the faces you should be able to see layering in both the sandstones and the pebble beds.

Explain why they are layered.	sand and pebbles carried in water and settled
[You might have done an experiment in	out in water
school to show why].	

3. Notice the slope between the rock face and the quarry floor. It is sometimes called a scree slope.

What do you think it is made from?	sand and pebbles
How do you think it formed?	sand and pebbles fallen from the faces[by
	gravity]

4. Match the field sketch with what you can see in this part of the quarry. Label the sketch as indicated on the sheet.

5. Move northwards a few metres to find a piece of sandstone to investigate. There are several blocks left behind after the quarrying, so there is no need to go up to the face.

What happens when you rub the sandstone	Sand grains break away
with your fingers?	
What is the name of the hard mineral that	Quartz
sand is made of?	

6. Collect some of this sand in your hand or on a piece of paper.

Look at the grains with a magnifier.

Describe their shape:	Tend to be fairly rounded, though some may
fairly rounded, fairly angular, or in between	be in between
Are the grains mostly the same size or mixed	Tend to be same size within single sample
sizes?	
Measure the size of the grains:	About 1mm is usual, though some are under
over 1mm, , about 1mm, under 1mm	1mm and may contain some shiny flakes of
[1mm graph paper is useful]	the mineral mica.

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7. After rubbing the sandstone, your fingers might feel smooth and be coloured. This is caused by the iron mineral haematite sticking to the sand grains and in the fine clay that is mixed with the sand.

What colour is the iron mineral, haematite?	Red
Is it strong or weak in sticking the sand grains	Fairly weak
together in sandstone?	
What does the sandstone easily become?	Sand

8. If you have a water dropper you could test your sample.

Is it porous or not?	Most are porous
What happens to most of the water when it	Soaks into the ground[soil & underlying
rains in this area?	sandstone]

9. During the rest of the visit look out for sandstones made of smaller or larger grains than your first sample.

# Third Activity ANSWER SHEET Site C - Park Hall Pebble Hunt – worksheet Also need Park Hall Pebbles – Identity sheet

Find as many different kinds of pebble as you can and try to identify them with the help of the Park Hall Pebbles identity sheets.

1. Look at the shape of the pebbles

Describe the shape of most of the pebbles	Rounded
What does the shape indicate about how	Rounded by contact with other pebbles
they were transported to here?	[relate to sugar cubes demonstration- dry]
	rolling along bed of a river

2. Most of the pebbles are made of very hard quartz and quartzite

Why does hardness improve a pebble's	Resists attack, with less hard ones breaking
chances of survival?	up sooner on the journey

3. The pebble identity sheets suggest where many of the pebbles came from

In which direction did they come from and	From south to north
heading to?	

4. Look out for contact points on many of the pebbles. Some of the pebbles have been broken through these contact points

What to you think might have caused the	Great weight of overlying sand/sandstone and
pebbles to be marked and broken in this	pebbles/conglomerate over millions of years
way?	

5. In the space below draw one of the pebbles you have identified. Show as much detail as you can and give a cm scale.