



## **Examples of Work**

J.R.

## **Rocks - Year 3**







(	Year	3	Торіс	Rocks			
Come me							
Focus of assessment (National Curriculum statements)							
and the second sec	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.						
PLAN Planning for assessment	Description of activity						
	The pupils were asked to record a	ey had prior to starting the topic.					

	ASSESSMENT		
Oral evidence	Examples of work	Knowledge	
Teacher observations     Because of the topic title on the KWL grid, J.R. focused only on rocks and did not consider fossils or soils.	Received to dood.	J.R. has little current knowledge of the different types of rocks. He is not using the specific scientific vocabulary for this topic. He shows no prior knowledge of the uses of rocks. He recognises one property of rocks – 'hard'. <u>Working scientifically</u>	

	Year	3	Торіс	Rocks			
Come me							
Focus of assessment (National Curriculum statements)							
Min in	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.						
PLAN W Planning for assessment	Description of activity						
	The pupils worked in groups to so	g their own criteria.					

	EVIDENCE OF LEARNING						
Oral evidence	Examples of work	Knowledge					
	have been and the second	J.R.'s group has sorted the rocks by texture, size, appearance and weight.					
Teacher observations	Skiney Duly both	Working scientifically J.R. made simple observations and classified rocks using his own criteria, recording with discrete and overlapping sets.					

	Year	3	Торіс	Rocks			
(Annon							
Q	Focus of assessment (National Curriculum statements)						
	Description of activity						
PLAN V							
	After grouping the rocks, the pupi	Is took a closer look at the differen	t types of rock describing them in	more detail.			

EVIDENCE OF LEARNING	ASSESSMENT
Oral evidence Examples of work	Knowledge
Oral evidence Examples of work   Image: Strength of the strength of th	Knowledge     J.R. used a wider range of vocabulary to describe the appearance and simple physical properties of a selection of rocks.     Working scientifically

	Year	3	Торіс	Rocks			
(Qn-	Focus of assessment (National Curriculum statements)						
	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.						
PLAN S Planning for assessment	Description of activity						
	The pupils were presented with the question, 'Which rock would be best suited to build steps outside?' First the pupils identic properties that the rock would need. Then, they planned a series of comparative tests to determine the most suitable rock for purpose.						

	Evidence of Learning				
Oral evidence	Examples of work	Knowledge			
Teacher observations     The durability test involved rubbing not scratching.	Question Which rock would be best suited to build steps sutside Prediction Think granganite because, granite jort going to wa wear, its inpermeable, and it are cart of experiment on hardness keep the same amounts of scratches. To experiment on voter, in experiment on durability keep the same amount a generative times a work of voter, amount a generative times a work of voter.	Working scientifically     J.R. used his knowledge of properties and his previous observations of rocks to make a prediction. He set up a comparative test, identifying variables to change and control.			

	Year	3	Торіс	Rocks			
Comme me							
Q	Focus of assessment (National Curriculum statements)						
<i>M</i>	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.						
PLAN W Planning for assessment	Description of activity						
	Then, they carried out the comparative tests to determine the most suitable rock for the purpose.						

	ASSESSMENT				
Oral evidence	Examples of work				Knowledge
	Hardness Rock granite chalk limestone slate sandstone marble Permeability Rock granite chalk limestone slate sandstone	Nally X X X X X X X X X X X X X X	Stick 1 1 1 1 1 1 1 1 1 1 1 1 1	Hyngly	J.R. tested and understood the properties of hardness, permeability and durability and applied his knowledge to select a rock that is suitable for the purpose.
Teacher observations J.R. awarded marks to the rocks for each property based on the number of crosses in the row. For durability, 3 crosses for granite shows that it is durable (in all three rub tests there was no marking). For permeability, 3 crosses indicates that it is not permeable as a cross indicates that no water soaked in.	marble <u>Durability</u> Rock granite chalk limestone elate sondstone marble Conclusion I thurk outside is hydropess and durab	The best grand gran grand gran grand gran	2 rubs 2 rubs 2 rubs 1 1 1 1 1 1 1 1 1 1 1 1 1	ild steps outer mark on permeability	Working scientifically J.R. recorded his data on a prepared table. He drew a conclusion from his results which answers the original question.

	Year	3	Торіс	Rocks			
(mm	Focus of assessment (National Curriculum statements)						
	Compare and group together different kinds of rocks on the basis of their appearance and simple physical prop						
PLAN V Planning for assessment							
	To consolidate their understanding and explore a wider range of properties, the pupils conducted a 'virtual experiment' and recorded the results.						

	ASSESSMENT	
Oral evidence	Examples of work	Knowledge
Teacher observations	Rock is it permeable? Does it wear? Does it float? Marble X X X X X Punice X X X X X Conclusion Suite doesn't year board because because its durable. I solar groups Marble so its because its not groups Marble is permeable because its water goes prover spit because that is permeable because its water goes prover doesn't goat Chalk is permeable because its water goes provent spit because water goes provent doesn't goat Chalk spits because its weak water goes provent doesn't goat Which rock do you thick is the storaged Why? & pranter because it doesn't doesn't doesn't because it doesn't doesn't goat	J.R. compared the rocks and gave simple definitions of the properties. His answer to the marking question uses evidence from the experiment, but this activity did not require him to apply this knowledge.     Working scientifically     J.R. wrote statements about the rocks which are consistent with the data.

[	Year	3	Торіс	Rocks	
(Annon	Focus of appagement (National Curriquium statements)				
	Focus of assessment (National Curriculum statements)				
PLAN	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.				
PLHN S Planning for assessment	Description of activity				
	The class went on a walk to a local church and its cemetery to observe the uses of a range of types of rock and changes to them over time.				

	ASSESSMENT	
Oral evidence	Examples of work	Knowledge
"Marble is a good rock for graves because it does not wear away and you can read the names. Sandstone wears away, so it is harder to read. " Teacher observations	As a result of this school trip, what have you learnt? Learnt that takes have to be the came the control of the school of the	In the churchyard, J.R. noted that there were many different types of rock and identified and described them. He could identify different types of rock and why they had been used. In his report, he showed simple understanding of weathering and permeability. Working scientifically

6.222	Year	3	Торіс	Rocks	
Com m					
Q	Focus of assessment (National Curriculum statements)				
Mus is	Describe in simple terms how fossils are formed when things that have lived are trapped within rock.				
PLAN V Planning for assessment	Description of activity				
	After watching some videos, the class discussed the stages of fossil formation and recorded the process in their own words.				

	EVIDENCE OF LEARNING		
Oral evidence	Examples of work	Knowledge	
Teacher: "Is it a fossil when it is first buried?"	so Sozt parts not away.	J.R. defined a fossil in his own words.	
J.R.: "Not until the animal has rotted away."	Minerals harden bones. Minerals harden bones. Minerals harden bones. Minerals harden bones. Minerals harden bones. Nock alled up the motils. It motions into mail fusil tym its? It motions into a fossil.	J.R. described the sequence of fossil formation in his own words using scientific vocabulary. He also knows why buried fossils appear at the surface.	
Teacher observations	May is the fixed found? The costil may go up to air because hills might appear and renearlologist try to to girld a fossil	Working scientifically	
	When a termistories onto the seabed. What is a forsil? A possil is a rock that has a rock that		

	Year	3	Торіс	Rocks		
Come me						
Q	Focus of assessment (National Curriculum statements)					
and the second sec	Describe in simple terms how fossils are formed when things that have lived are trapped within rock.					
PLAN V	Description of activity					
	The pupils made their own fossils by pressing a shell into clay and making a plaster cast.					

	EVIDENCE OF LEARNING				
Oral evidence	Examples of work	Knowledge			
	How is thus like a real fossil? It is like a mould possil because it leaves the mould of a search searchell. How is it not like a real fossil? It's made drawny, not sede de sediment.	J.R. applied his knowledge of the process of fossil formation to make simple comparisons between his model fossil and the real ones.			
Teacher observations		Working scientifically			

	Year	3	Торіс	Rocks		
( Comm	Focus of assessment (National Curriculum statements)					
Min in	Recognise that soils are made from rocks and organic matter.					
PLAN Description of activity						
		three-quarters full with water. The what the soil was made from. They				

	EVIDENCE OF LEARNING	Assessment
Oral evidence	Examples of work	Knowledge
	Soil and water mixed	J.R. correctly labelled the main components of the soil and wrote a simple description of how soil is formed. He described what organic matter is.
Teacher observations	Soil is made of organic matter that rots away and rock act like a base and dol tority rots are away. What is organic matter? Pranic Matter is dead parts of a living thing	Working scientifically J.R. presented his observations as a labelled diagram.

	Year	3	Торіс	Rocks	
(Ann					
X	Focus of assessment (National Curriculum statements)				
	Recognise that soils are made from rocks and organic matter.				
PLAN W Planning for assessment	Description of activity				
	As part of a later topic on plants, the pupils made observations of the characteristics of different soil types.				

	ASSESSMENT	
Oral evidence	Examples of work	Knowledge
	Claysol Chalksol sendy soil Claysol Chalksol sendy soil Smelly powdery 'grganic matter ; coarse grey and while white 'dusty . hard 'lump' lumpy 'dark orange	J.R. remembered the components of soil and identified them in some of the different soil types.
Teacher observations	Chalk baloam Poat soil Souge gritty Balogo gritty Dragnia matter gritty gritty ansty Ary inform Do diggerent types of soil aggest a plants growth?	Working scientifically J.R. used drawings and notes to record his observations of the soils. J.R. wrote the final question when asked to think how this activity might link to their current topic of plants.

	Year	3	Торіс	Rocks	
Come me					
Q	Focus of assessment (National Curriculum statements)				
<i>a</i>	Recognise that soils are made from rocks and organic matter.				
PLAN W Planning for assessment	Description of activity				
	The pupils then set up a test to answer their question.				

	EVIDENCE OF LEARNING	Assessment
Oral evidence	Examples of work	Knowledge
	Prediction that days can keep a plant growing Reperance the soil has nutrients and it's still so it might goto together acter, there is water so even it will anonor properly be because thay can hold the roots simmy.	J.R. demonstrates an understanding that plants require nutrients and to be anchored in the ground (Year 3 - Plants statement).
Teacher observations	Fair test We will keep the same amount of water. plant pots place Variable .so I we are changing the type of soil.	Working scientifically J.R. used his knowledge of the constituents of soil and the needs of plants to make a prediction. He also identified control and independent variables.

	Year	3	Торіс	Rocks	
Corre me					
Q	Focus of assessment (National Curriculum statements)				
<i>A</i>	Recognise that soils are made from rocks and organic matter.				
PLAN Planning for assessment	Description of activity				
	The pupils then used their results to write a conclusion.				

	ASSESSMENT	
Oral evidence	Examples of work	Knowledge
	Filing that the plant that grew the best was dry say coile because it had more nutrients and organic organic matter and the stem got through. I think the plants that grew the worst are on that soil and chalk low ban because its I dry not much nutrients or organic me matter.	J.R. compared the water holding properties of the different soils and demonstrates again that he understands that soils contain organic matter. His observations of the effect of grain size were linked to his observations of the stems emerging.
Teacher observations	it. ruge gaps of the rocks helped	Working scientifically J.R. links his knowledge of what plants need to grow and his observations of the characteristics of the different soils when drawing a conclusion.

	Year	3	Торіс	Rocks	
Come me					
Q	Focus of assessment (National Curriculum statements)				
<i>A</i>	Recognise that soils are made from rocks and organic matter.				
PLAN V Planning for assessment	Description of activity				
	The pupils added what they had learnt about rocks during the topic to the table they completed at the start.				

	Assessment		
Oral evidence	Examples of work		Knowledge
Teacher: "Why is chalk used for drawing?"	Science: Rocks	J.R. refers to properties and uses of rocks, although he does not link	
J.R.: "Because it is soft and crumbly so it rubs off." Teacher observations	K What I know What I want to know What I have learn There are money laps of rocks. Foods are big. They are everywhere. They are to darod. They are to darod. They are in darod. They are in the darod. They are interval. They are interval.	t dissement high igh metal es used coop years goosils tack.	them until prompted. He includes more information about fossils but does not refer to soils. Working scientifically



## Overall summary

## Secure

J.R. can use a range of criteria to sort and compare rocks. He has used observations and tests to extend his knowledge of their properties and he can apply his knowledge to suggest which rocks are best suited to particular purposes. J.R. can sequence the stages of fossil formation and uses his knowledge in his comparison of a real and model fossil. J.R. knows the constituents of soil and recognises that not all soils are the same. He can apply this knowledge in the context of growing plants.