

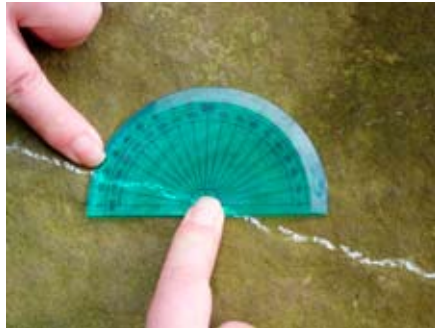


Sandricks Activity Card 4 Measuring the rocks



Location: Bottom of sandrock **Time:** 30 minutes
Equipment: Standard size protractor, piece of chalk (optional)
Audience: KS2

Activity Description: Use of the protractor could be practised in class first. Put the children into pairs and find a good piece of rock to measure, with characteristics of cross-bedding: layers laid down at an angle to each other as shown in the first picture.



Make sure you can identify by eye the general trend of the cross beds. You could make a temporary line by holding a piece of grass or the edge of a piece of paper. You could also carefully draw along this line with chalk, but be sure to remove chalk marks with water and a cloth when finished, as chalk marks may damage the surface of the rock.

Place a standard size protractor horizontally against the rock as shown in the second picture. The children are to read off the angle from an individual cross bed to the line of the protractor. Record up to 10 angles as measured by each pair of children on a grid as shown below and give a prize for the highest angle measured.



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Grid to record angles of cross bedding in Sensational Sandricks

Team name	
Row number	Angle in degrees 0-90
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

High Weald Teaching Point: The angles at which the sandstone is layered show that the rock was laid down in a shallow channel by a massive river that has now dried up. The steepness of the angles shows the strength of the current and changes of direction show that this changed over many years. Expected results are up to 30 degrees.