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Sand dunes – a study of the different dune formations in the Namib Sand Sea, Namibia

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The Namib Sand Sea has spectacular dunes, some of which are 5700 years old. Large, complex, linear dune in the northern part of the Namib Sand Sea provide new information on the age and internal sedimentary structures of these dunes, with important implications for interpretations of paleoclimates and the rock record of eolian sandstones.

Academia Secondary School learners study several science subjects including Life and Physical sciences. As part of their Science course, they study the environment and landforms. To better understand the dune dynamics, several grade 8 pupils, 35 learners in total were taken to the field to demonstrate the formation of dunes.

One of the highest points in the Namib Sand Sea - Dune 7 which is 388 meters was visited. Learners made models of the dunes in the classroom with different types of modeling clay, such as oil-based, polymer, dough and pottery clay. The learners also carried out hands-on exercises on the link between different types of sand, wind speed, size and altitude of the dunes. Field trips are a great opportunity for learners to learn how sand dunes are formed and show how simple experiments can be used to demonstrate dune formation.