



İLKÖĞRETİM 8. SINIF ÖĞRENCİLERİNDE FOTOSENTEZ VE SOLUNUM KONUSUNDA OLUŞAN KAVRAM YANILGILARI

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Abstract

In this study, it is aimed to determine the misconceptions of grade 8 primary school students about photosynthesis and respiration in the unit titled Living Things and Energy. Within this context, 46 students studying in grade 8 at a primary school in the centre of Samsun were subjected to an achievement test with 19 questions. The reliability of the achievement test was calculated as KR20=0,85 and the obtained results, having been analyzed by means of SPSS18, were reflected in percentages and frequencies. According to the results obtained at the end of the study, photosynthesis and respiration, among the most important topics of Biology, are confused with each other. It was determined that the majority of the students had such misconceptions as that plants produce energy through photosynthesis, they breath through photosynthesis, photosynthesis happen by day and respiration happens by night and that plants produce energy, for they yield fruit and vegetables. In the light of obtained results, it was concluded that teaching both topics at the same time makes the learning process difficult and increases misconceptions about energy conversion.

Key Words: Photosynthesis, respiration, misconception, science education.