



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

PRACOVNÍ LIST

Výukový materiál GE 02 - 55	Název: Factors influencing...
Tvůrce: Mgr. Šárka Vopěnková	Tvůrce anglické verze: ThMgr. Ing. Jiří Foller
Projekt: S anglickým jazykem do dalších předmětů	Registrační číslo: CZ.1.07/1.1.36/03.0005
Tento projekt je spolufinancován ESF a SR ČR	

- **Example 1:**
- **In a large panmictic population there were detected 16% of individuals with recessive form of a qualitative feature (it is a complete recessivity). What is in this population:**
- **The frequency of both alleles of the gene?**
- **Frequency of dominant homozygotes?**
- **Frequency of heterozygotes?**
- **Example 2.**
- **Blood cells about 84% of the population of our country have character (agglutinin) Rh. Blood group of these people is symbolized Rh +. Remaining 16% of our population do not have this character, so they have character Rh-. By the assumption that the Rh factor is a monogenic autosomal, dominantly hereditary, Rh + people are therefore either dominant homozygotes or heterozygotes.**
- **What is the frequency of Rh allele and particular genotypes of Rh group in our population?**

Example 3:

- **A blue-eyed man, whose parents both have brown eyes, married a girl who has brown eyes and whose father was blue-eyed, while his mother was brown-eyed.**
- **Their only child so far has brown eyes.**
- **What are the genotypes of the child, the parents and all the grandparents, if you know that brown eye colour is dominant over blue?**