


The Genetic Code

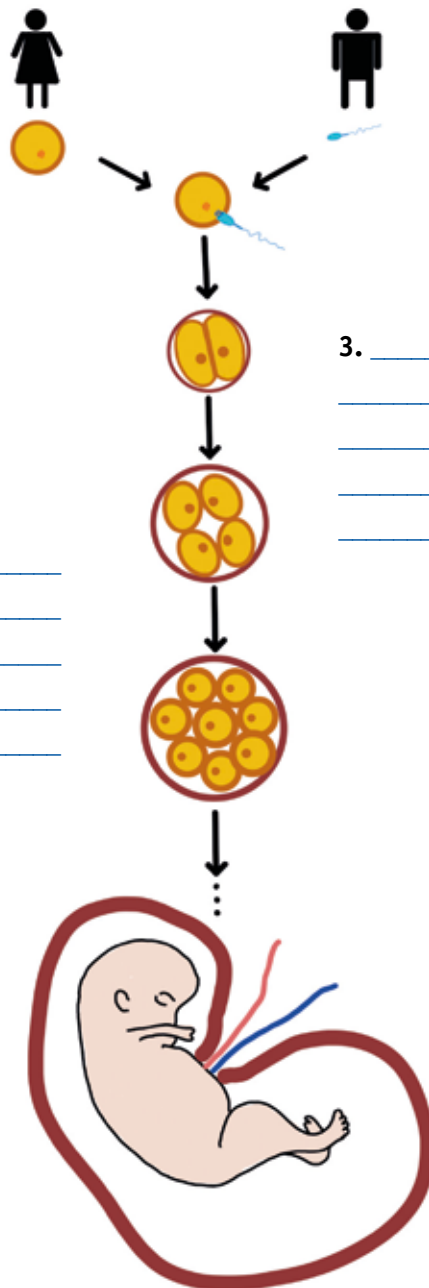
 **2a. How is our genotype constructed?**

Match the sentences with the correct numbers in the graphic. Start copying the sentences after that.

- a. The cells develop different functions. This is how e.g. organs, the blood system or body features evolve.
- b. In the end a human being is formed and keeps on growing and developing.
- c. The other 23 chromosomes come from one of our father's sperm cells.
- d. When these two meet, the chromosomes combine to a full set of 46 chromosomes.
- e. We get 23 chromosomes from our mother, stored in the egg cells.
- f. After that, the cell divides. This leads to growth.

| | |
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1. _____



2. _____

3. _____

4. _____

5. _____

6. _____

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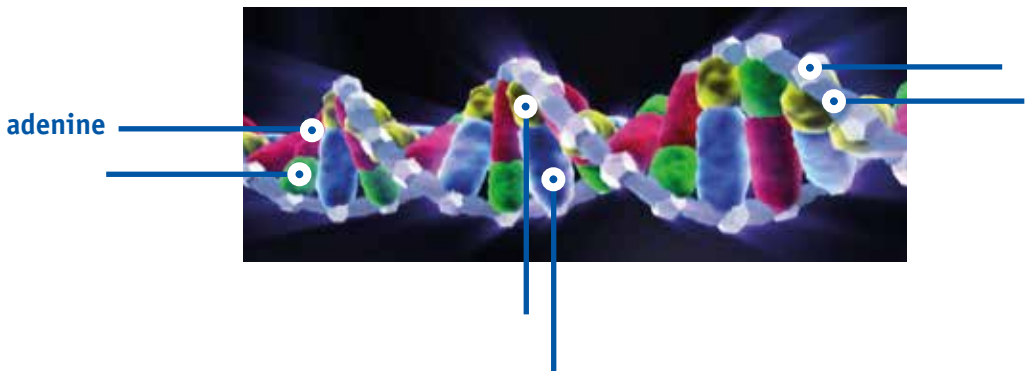


2b. Our DNA / genetic material.

Fill in the gap text about the DNA.
Then use the gap words to label the graphic.

cytosine – sugar – thymine – phosphate – guanine – adenine – DNA

Each of our chromosomes consists of a twisted rope ladder known as **DNA**. The side pieces are constructed out of _____ and _____. The rungs are made up of pairs of two bases. Either _____ and _____ or _____ and _____.



2c. Genotype portions.

Match the karyograms with the different animals.
Also fill in the number of chromosomes each individual has.

A karyogram shows the full set of chromosomes of a living organism. The chromosomes are arranged according to their size. Even when karyograms show a large number of chromosomes, this does not automatically mean they come from a complex creature.



animal: _____

number of chromosomes: _____



animal: _____

number of chromosomes: _____



animal: _____

number of chromosomes: _____