



# Conception: Class for elementary school "fascination insect"



Picture 1: Students with wooden animals in the show garden.

The class "fascination insect" was designed for elementary school. It was designed as a part of the project -INsektenSchutzAkademie INSA – Insektenschutz im eigenen Garten. The courses takes about 3,5 hours.

### 1. Introduction – Tour through the show garden

Wooden animals children know from the garden are hidden in the show garden. We use insects, birds, mammals, spiders and so on. The students sort the animals by their number of legs (Picture No.2). The children find out, that insects always have six

legs and that an easy way to identify an animal as an insects is to simply count the number of legs.

The search for animals takes place in the show garden, which is about 2000 m² large. The show garden is one example for insect-friendly garden landscaping. In the garden Information boards inform about deadwood, flower meadow, water elements, perennial plants, sand plot and stone elements. Plant plugs nearby the plants inform about the species. We used only regionally certified seed and native perennials.



Picture 2: Map with wooden animals sorted by their number of legs.

## 2. Rotation Work



Picture 3: Work sheet for the rotation work

5 work station are developed with different information about insect and their environment. The students do the rotation work in groups of 3-5 children.

#### Body structure of insects

The children get an insect puzzle which is constructed of wood, metal and acrylic glass. By doing the puzzle the students understand the threepart body structure of insects with the six legs and two pair of wings located at the thorax.

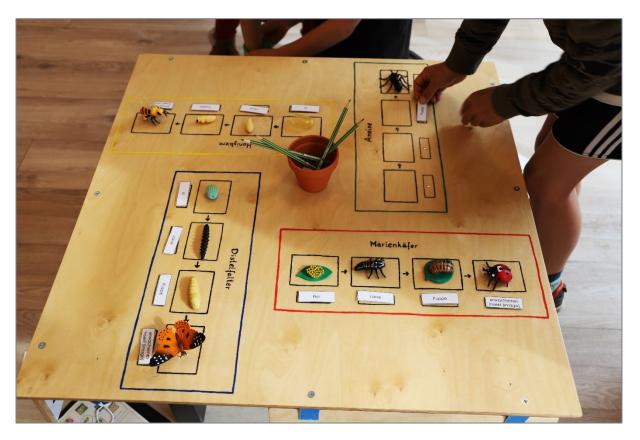
In a final step the children paint their own fantasy-insect on their work sheet. For this task they have to consider the threepart body structure of insects (divided in head, thorax and abdomen). They find examples on a poster.



Picture 4: Insect puzzle constructed of wood, metal and acrylic glass

#### Development of insects

In little bags of different colours plastic models of different stages of development (egg, larvae, pupae, imago (adult insect) of four different holometabolice insect species (painted lady (butterfly), lady bug, honey bee, ant) are prepared. The students bring the models and the matching lettering in the correct order.



Picture 5: Students bring the plastic models (different stages of development) in their correct order.

#### Compound eyes and UV-light-vision

At the beginning the students watch a short movie about compound eyes and their function. Afterwards they look at the the eyes of a dragon fly under a digital binocular loupe and should draw a compound eye themselves. To get an idea about the UV-light vision of insects the children get the possibility to look at a (artificial) flower meadow under normal light (Picture 7) and under UV-light (Picture 8).



Picture 4: In the UV-light box a flower meadow is presented under normal light and UV-light.



Picture 7: Flower meadow under a human point o view



Picture 8: Flower meadow under a bees point of view

# Schoolyard design – climate and insect friendly

A climate an insect friendly schoolyard should be designed with various picture elements.



Picture 9: Insect friendly designed school yard

#### Your world without insects

In a first step the students are explained the pollination using the example of honeybee a cherry blossom. For this part headsets for each child and a poster are prepared.

Now they get the task to go grocery shopping, at a little shop at the table, in a world without any insects. The students have to find out which groceries are still available ("green" groceries) and which rely on pollination by insects ("red" groceries).

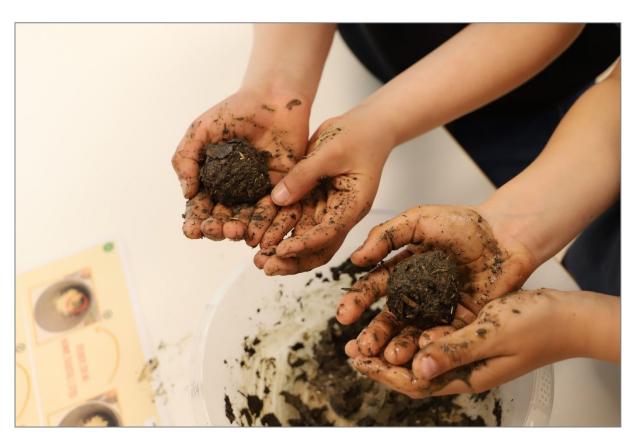
"green" groceries	"red" groceries
Cheese	Apple
Eggs	Cherry
Toast	Strawberryjam
Fish	Strawberry ice crem
Sausages	Honey
	Chocolate nut spread
	Ketchup



Picture 10: Students go grocery shopping in a world without any insects

#### Practical class

At the end of the class the students produce their own giveaways. Flower soil, clay, regionally certified seed and water are the ingredients for the seed bombs. The seed bombs could be planted at the schoolyard or in flowerpots in school or at home. With the seed bombs the children get the possibility to improve their environment for insects.



Picture 11: Seed bombs are prepared

#### Board game: We save the insects.

With the board game: We save the insects the students get the possibility to control their knowledge about insects and their living environment.



Picture 12: Board game: We save the insects!

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