

## **Scientific Museum Tour with Let's Science!**

IBSA Foundation for scientific research proudly presents the Science Museum Tour. This innovative project gives secondary I school classes the opportunity to attend workshops in museums free of charge. Pupils can experience science in a different, hands-on way and benefit on several levels.

### **Workshop offered**

#### **Museum of Anatomy, Basel**

- **Blood vessel preservation (corrosion technique):** Under the expert guidance of a taxidermist, the participants will learn exciting facts about a particularly fascinating anatomical taxidermation technique: using plastic to make the blood vessels visible on a pig's kidney and experience for themselves how a work of art is created.

For young people aged 14 and over.

Duration: 90 minutes. Curriculum 21 reference: Nature and Technology, Understanding Body Functions. Up to 15 people per workshop. Dates: Mon. to Fr. 9:15 a.m. to 5 pm.

#### **Museum of Communication, Bern**

- **Data on the web – a look behind the click:** What happens to my data on the Internet? How much is my attention worth? What is big data? And where does AI get its intelligence from? In this workshop, we're going to look where most people tend to look the other way. We're going to scratch the glittering surface of the Internet and take a critical look behind the click. Young people examine their own behavior and consider possible future scenarios.

Cycle 3 and upper secondary education.

Duration: 90 minutes. Curriculum 21 reference: Media and Informatics module 1/Media. Groups of 25 or more participants will be divided. To visit the museum before or after the workshop, allow at least 1½ hours – ideally 2-3 hours. Dates: Tue. to Sun. 10 a.m. to 5 p.m.

- **Only until July 20, 2025: Workshops "DANCE!":** From Walking to Grooving: We all have bodies and we all dance. Why? And when does a movement become a dance? Starting from everyday life, we develop movement sequences and discover what our bodies are capable of. At the end, we head to the dance floor together. It not only feels good, but also looks really cool thanks to the black light. It's showtime!  
Cycle 3/Secondary School I

Duration: 90 minutes (independent visit of the exhibition "Dance!" recommended, approx. 30 minutes)

The workshop can only be booked Tue-Fri at 09.00 a.m. and only for one class of max. 24 pupils. To visit the museum before or after the workshop, you should allow at least 1½ hours – ideally 2 to 3 hours.

- **Only until July 20, 2025: Guided tour of the exhibition Dance!** May we please have the next dance? We reach out to the Dance! seduction: we are happy to take the lead in moving through our new exhibition. It starts with communication without words. You see yourself as a group and part of youth cultures. You let yourself be carried away by technical gimmicks into movements and at the end we might go to the exit together: If you want to dance in the club, you can dance. But there would also be a bar to lean against. Cycle 3/Secondary School I.

## Kulturama – Museum of Mankind, Zürich

- **Right in the middle of the heart:** How is our heart constructed? What is its function? How does the heart develop during pregnancy? And where does the heart symbol come from? Original specimens from different mammals and models illustrate the structure and function of the heart. An examination of the symbol, which is ubiquitous in language and image, takes place. The individual's heart rate and blood pressure are measured, and the heart tones of different animals are compared.  
Cycle 3/Secondary School I.  
Duration: 120 minutes. Curriculum 21 reference: NT 7, Understanding the Functions of the Body. Dates: Bookable from Tue. to Fri. in the morning from 10 am to 12 pm or in the afternoon from 1 pm, the museum closes at 5 pm and on Wednesday at 8 pm.
- **From the fertilized egg to the baby:** Using real specimens and models, we explain what happens in the womb during pregnancy, why we humans are born prematurely, or what we need to look out for when we hold a baby. In the second part, you will deal with further questions independently. How is a due date calculated? How long do pregnancies last in the animal world? How well can the strapped-on pregnancy simulator cope with everyday situations? A short film about pregnancy and childbirth rounds off the event.  
Cycle 3/Secondary School I.  
Duration: 120 minutes. Curriculum 21 reference: NT 7, Understanding the Functions of the Body. Dates: Bookable from Tue. to Fri. in the morning from 10 am to 12 pm or in the afternoon from 1 pm, the museum closes at 5 pm and on Wednesday at 8 pm.
- **Bones and skeletons:** Over 200 individual bones form the human skeleton and enable us to walk, stand or dance. But how are bones moved? Bones protect, support, and move, bones live and heal. What is the function of our spine? What are bones made of and how are they structured? Basic material for our skeleton or an ingredient in many foods - we encounter bones everywhere!  
Cycle 3/Secondary School I  
Duration: 120 minutes. Curriculum 21 reference: NT 7, Understanding bodily functions. Dates: Bookable from Tue. to Fri. in the morning from 10 am to 12 pm or in the afternoon from 1 pm, the museum closes at 5 pm, on Wednesday at 8 pm.
- **How we learn:** We learn throughout our lives. Consciously or unconsciously, on purpose or by chance, by example or practice or from mistakes.  $a^2 + b^2 = c^2$ . The capital of France is Paris. Tears trigger compassion and smiles have a sympathetic effect. We can walk on two legs without losing our balance. Chocolate tastes good, but too much causes nausea. But how exactly does this learning process work? What happens in our brain? What tools and techniques help us to learn?  
Cycle 3/Secondary School I  
Duration: 120 minutes. Curriculum 21 reference: NT 7, Understanding bodily functions. Dates: Bookable from Tue. to Fri. in the morning from 10 am to 12 pm or in the afternoon from 1 pm, the museum closes at 5pm, on Wednesday at 8 pm.
- **Our senses:** They are as vital as oxygen and food. They make life and experience possible, thanks to them we can act and react. Touch, sight, hearing, taste and smell shape our consciousness and give our surroundings a face. The sensory organs begin to develop during pregnancy. The rapid development of the first months in the womb culminates in a flood of sensory impressions - birth. After that, the senses

function in the new world. They quickly become accustomed, stimulate our brain, and drive it to peak performance.

Cycle 3/Secondary School I

Duration: 120 minutes. Curriculum 21 reference: NT 6, Exploring senses and signals, NT 7, Understanding bodily functions. Dates: Bookable from Tue. to Fri. in the morning from 10 am to 12 noon or in the afternoon from 1 pm, the museum closes at 5 pm, on Wednesday at 8 pm.

### **Mühlerama, Museum of Food Culture, Zürich**

- **Baking crispy "Bürli" and fine "Weggli" & Mill Tour:** "Weggli" and "Bürli" are typical, regional pastries. It's not easy to make, but let's try it! As the prepared "Bürli" dough rises, we mix the ingredients for the "Weggli" and process them into a fine, supple dough. Now let's start shaping! While the "Bürli" and "Weggli" are baking in the oven, we go on the tour of the mill: the imposing 100-year-old mill extends over three floors up to under the roof. Everywhere there are different machines. Wheels are turning, belts whirring. It is shaking and rattling. On the one-hour tour with a mill expert, the students will experience first-hand what it takes to produce one of the most important ingredients of our diet: flour. From 4th to 9th grade.  
Duration: 3 hours. Curriculum reference: Nature and Technology, 7/Understanding Body Functions. Class size: max. 25 children and 2 adults.

### **Technorama, Winterthur**

- **Radioactivity in everyday life - Natural radiation:** Radioactivity is not only found in nuclear power plants, but also in foods such as mushrooms and diet salt, in normal rose fertilizer and, of course, in the air. The decay of certain atomic nuclei, which produces radiation, is part of our everyday lives and takes place in every household. This workshop is all about testing various objects and substances for radioactivity. We use the Geiger counter to detect radiation and investigate where it comes from and how we can protect ourselves from it. This workshop is intended as an introduction to the topic of radioactivity and focuses on radioactivity in everyday life.  
Ages: 12, 13, 14, 15+.  
Duration: 45 minutes. Curriculum 21 reference: Subject area curricula, NT.2.1.1c, Subject area curricula, NT.1.1. Dates: Mon. to Fri. from 10 am to 5 pm.
- **Do not try this @home -- Microwaves:** In our time, everything has to happen quickly. A microwave is very helpful for this! But how does it work? And why can't you boil eggs in it? And why can't you use metal objects in the microwave? Microwaves are electromagnetic waves in the frequency range from 1 to 300 GHz. How they can heat food is the focus of this workshop. But not only that: do the experiments that are not normally allowed. A microwave is not only practical, it is also fun!  
Age: 12, 13, 14, 15+  
Duration: 45 minutes. Curriculum reference: Departmental curricula, NT.1.2.b, Departmental curricula, NT.2.1.1b, Departmental curricula, NT.2.1.2b