

Content

- How do spiders spin their webs?
- How do spiders catch their prey?

Target group

- Children ages 8 to 12
- Level A1+/A2

Language goals

The children will be able to

- Understand a short (technical) film
- Find precise information in a text
- Expand their passive and active vocabulary
- Understand technical terminology in context
- Understand and answer simple thematic questions
- Express their ideas/opinions using simple language
- Use and develop learning strategies (use images as a learning tool, take notes, make conjectures, reconstruct processes, correctly spell words)
- Match images to text
- Memorize short texts
- Complete a fill-in-the-blank
- Prepare and hold a short presentation for the group
- Understand and follow instructions

Word bank

Spinne (spider), *Spinnennetz* (spider web), *spinnen* (to spin), *Faden* (thread), *Ast* (branch), *festkleben* (to stick), *Grundgerüst* (framework), *Speichenfäden* (spoke threads), *Spiralfäden* (spiral threads), *von außen nach innen* (from outside to inside), *von innen nach außen* (from inside to outside), *Hinterleib* (abdomen), *Vorderleib* (chest), *Augen* (eyes), *Klauen* (claws), *Laufbeine* (legs), *Spinnenwarze* (spinneret), *sehen* (to see), *riechen* (to smell), *klebrig* (sticky), *laufen* (to walk)

Materials

- White sheets of standard letter paper
- Black, red and green colored pencils
- Laptop and projector
- Audio speakers
- Blackboard and chalk/whiteboard and markers
- Magnets/blu-tack
- Craft supplies for chosen craft project (<http://www.kinderspiele-welt.de/basteln-und-werkeln/spinnen-basteln.html>)
- Students' portfolios

Materials for printing and/or copying

- *Spider web* (Spinnennetz) worksheet
- *Spider web* (Spinnennetz) answer key
- *Spider web* (Spinnennetz) fill-in-the-blank
- Answer key for the *Spider web* (Spinnennetz) fill-in-the-blank
- *Spider* (Spinne) word cards
- *Spider web* (Spinnennetz) word bank
- My word bank sheet *Spider web* (Spinnennetz)
- *Now I know* (Ich kann schon) questionnaire

Materials for download

Spider template:

<https://goo.gl/Jd5P9t>

"Spider" craft project ideas:

<https://feltmagnet.com/crafts/spooky-spider-crafts>

Duration

3x45 minutes

Before the lecture/film		
Step	Content	Materials
1	Instructor welcomes the children and tells them that he or she was recently in a garden/on a balcony (for example), and saw a beautiful spider web. Instructor asks the children where they have seen spider webs before. Then the instructor says: <i>I am now going to hand out pieces of paper. Please draw a spider web on them that is as big as the piece of paper.</i>	White sheets of standard letter paper; Black colored pencils
2	Instructor and children hang the finished pictures on the board. Instructor then asks: <i>Have you seen before how spiders spin their webs?</i> The children report on their observations. Instructor suggests that they watch a film that shows how the silk spider spins its web.	Magnets/blu-tack
During the lecture/film		
Step	Content	Materials
3	During the first viewing, the children are instructed simply to watch and enjoy seeing how the spider works smartly and adeptly (Minute: 1:17-5:53). They then compare their drawings with the spider web in the film and correct their work if necessary.	Laptop and projector; Audio speakers; Drawings from the beginning of class
4	Before the second viewing (Minute: 1:17-5:53) the instructor hands out the <i>Spider web</i> (Spinnennetz) worksheet and discusses the assignment with the children.	<i>Spider web</i> (Spinnennetz) worksheet
5	The children compare their answers in pairs, and then discuss them as a group. For this, the instructor projects the answer on the board.	Laptop and projector; <i>Spider web</i> (Spinnennetz) answer key
6	Instructor reads the texts out loud and asks the children to repeat them. Afterward, the children are given a few minutes to memorize the texts.	<i>Spider web</i> (Spinnennetz) answer key

7	Instructor shows the children the <i>Spider web</i> (Spinnennetz) fill-in-the-blank by projecting it on the board. The children write the missing words in their notebooks. The class discusses the answers as a group.	<i>Spider web</i> (Spinnennetz) fill-in-the-blank; Answer key for the <i>Spider web</i> (Spinnennetz) fill-in-the-blank;
8	Instructor draws a spider on the board (https://goo.gl/Jd5P9t) and puts the following word cards on the teacher's desk: <i>abdomen, eyes, claws, chest, legs, spinneret, wings, arms, ears, hand, foot, tail</i> . The children select the word cards that belong to spiders and fasten them to the appropriate location on the board. Instructor helps if necessary.	Blackboard and chalk/whiteboard and markers; <i>Spider</i> (Spinne) word cards; Magnets/blu-tack
9	The students then copy the finished drawing on the board into their notebooks.	Children's notebooks
10	Instructor asks the children to take down their drawings from the wall and to get a green and a red colored pencil. The instructor then explains to them that some of the threads of the spider web are sticky so that animals that the spider can eat get stuck. Other threads are not sticky. The spider itself walks on these. The children watch the second film sequence (Minute: 5:53-6:57) and remember which threads are sticky and which are not. They color the threads that are sticky with red (spiral threads) and those that are not sticky with green (spoke threads).	Drawings from the beginning of class; Green and red colored pencils; Laptop and projector; Audio speakers
11	The drawings are compared after the film and the class discusses the answer.	Finished drawings of the children

After the lecture/film

Step	Content	Materials
12	Instructor invites the children to do a spider craft project and decorate the room with their work. Simple craft ideas can be found here: http://www.kinderspiele-welt.de/basteln-und-werkeln/spinnen-basteln.html	Craft supplies for chosen craft project
13	Instructor hands out the <i>Spider web</i> (Spinnennetz) word bank sheet to the children. The children go through the materials that they learned on the topic and choose 10 words or expressions that are important to them. They copy these onto the word bank sheet <i>Spider web</i> (Spinnennetz). Note: The instructor can also provide the <i>Spider web</i> word bank.	Finished <i>Spider web</i> (Spinnennetz) worksheet; Students' notebooks; My word bank sheet <i>Spider web</i> (Spinnennetz)
14	Instructor and children end the unit with a reflection round, in which they discuss what they have learned. Each child then fills out the <i>Now I know</i> (Ich kann schon) questionnaire to find out whether they have achieved the learning objectives. Instructor also gives feedback on student performance.	<i>Now I know</i> (Ich kann schon) questionnaire

15	The children hold onto the following in their portfolios: - <i>Spider web</i> (Spinnennetz) worksheet - My word bank sheet <i>Spider web</i> (Spinnennetz) - <i>Now I know</i> (Ich kann schon) questionnaire	Portfolios
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Further ideas for subject matter or CLIL teaching (natural sciences, biology):

- What do spiders eat? What eats spiders? - carry out a research project on the food chain
- Visit to a zoo - observe spiders in the terrarium
- Photography project: spiders and spider webs
- Did you know? Collect interesting information about spiders, prepare quiz questions and organize a trivia game.
- Spiders and other lucky charms - carry out a poll project (family, friends, fellow students) and present the results

Suggestion for the children at the end of the learning scenario

At the very end, the children gather around a computer or the instructor projects a computer desktop onto a screen. They look at the home page of the German Digital Kinderuniversität together. The instructor explains to the children that they now have completed the *Spider Web* (Spinnennetz) lecture in the *Nature* faculty together and draws their attention to the fact that there are many more interesting lectures in this faculty and in the *Technology* and *Humankind* faculties.

The instructor and the children click together on the At Home link and discover how the website works. As an example, the instructor logs in and goes to the lecture that they just worked through.

The instructor shows the children that the lecture begins with an introduction by Professor Einstein and Ms. Schlau and that their work is supported by Jowo and Christoph, the field researcher. Professor Einstein and Ms. Schlau also wrap up all the lectures and thereby frame the work on each theme.

The instructor explains to the children that they can re-watch the film at home and can even set the subtitles to German or English. That way, they can “catch” key words while watching and use these to collect points and solve three exercises and a bonus exercise on the film. The children can also get help from their parents or grandparents, from registering to solving the exercises. The whole family can have fun learning and everyone gradually becomes a professor at the Kinderuni.