

CLEANING IS DANGEROUS!

Be aware of household accidents

Homes are among the most dangerous places to be. Statistically, it is more likely to get injured at home than at work. Most accidents happen in our kitchens and in our living rooms while cooking or cleaning. We easily cut ourselves while preparing the meal or burn ourselves while handling with hot oil. And it happens also frequently that people are falling from a ladder while they are cleaning.

Just a small moment of inattention or distraction, and the accident happens. Understanding statistics and diagrams on household accidents can help to become aware of the risks.

Overview "CLEANING IS DANGEROUS"

What are the most frequent household accidents and how can I avoid them?

Context
Everyday life
Health and care
Further learning

Cognitive processes
Managing situations
Analysing situations
Critical thinking
Problem solving

Target group (incl. necessary prior skills and competences)

Adults (familiar with numbers up to 100 and basic information on percentages)

X2

Content
Quantity and number
Data and change
Charts / Diagrams
Percentage

Dispositions
Self-confidence
Math anxiety
Math difficulties

Outcomes and results

Being able to take measures to make my home a safe space.



Main information	
Content	Statistics Charts / Diagrams
Target group	Adults and young adults, learners who... <ul style="list-style-type: none"> • Cope with one-step, simple operations such as counting, performing basic arithmetic operations to cope with everyday situations; • Recognize and understand simple, common quantitative representations and use the information to make decisions
Learning intention	<ul style="list-style-type: none"> – Numeracy for personal and private purposes – Numeracy to understand society – Calculating and minimizing risks in everyday life
Duration	3,5 hours
Material and resources	Videos, diagrams
Group size	Range from 5 to 10 learners
Problem statement	<p>Many accidents occur at home. The most frequent accidents occur due to falls, cuts, burns, poisoning, electrocutions, and fire.</p> <p>Understanding statistics and diagrams on household accidents helps to become aware of the dangers and to minimize the risks in the learner's behavior.</p>
Working questions	<p>How to learn and identify risks at home and minimize them</p> <p>How to estimate risks at home and compare them with official statistics.</p> <p>How to work with statistics and diagrams and how to analyze and interpret them on different levels.</p>
Learning outcomes and results	<p>The students are able to gather information from diagrams. They will become more familiar with percentages.</p> <p>They are able to compare and to rank the risks which can occur while doing housework.</p> <p>They reflect their own situation at home and finally, they avoid risky behavior in the future.</p>



Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information ¹
30'	<p>1. Activation Presentation of the topic in a short video, followed by a discussion with the students about their own experiences.</p>	Video (appendix 1)	Information HIT Cognitive activation Questioning
30'	<p>2. Estimation Learners estimate which are the most frequent household accidents. Based to the learner's estimation, a first statistic is compiled.</p> <p>Working with percentages</p>	<p>Cards (appendix 2) Board</p> <p>If necessary: Montessori material (Flemo) Worksheet (appendix 3)</p>	<p>Teacher assisted group work</p> <p>Hands on learning</p> <p>HITS Differentiated learning</p>
60'	<p>3. Learning different types of diagrams and analysis</p>	Worksheets	HITS Explicite teaching Worked examples
60'+	<p>4. Analysis and presentation Learners discuss in groups of two persons a diagram and present the result in plenary.</p> <p>They analyse, compare and rank the risks using diagrams and statistics.</p>	Diagrams (appendix 4-6)	HITS Collaborative learning Differentiated teaching
30'	<p>5. Transfer Reflection and discussion What are the reasons for household accidents (carelessness, haste, inattention, disorder, ...)? How can I minimize the risks?</p> <p>What are the most important emergency numbers?</p>	Table of emergency numbers (appendix 9)	HITS Questioning Feedback

¹ for description and explanation of kinds of tasks, HITS and other background information please consult the teacher's/user's guide

Suggestions for the teacher/user

The example presented here should be considered as exemplary and inspirational material presenting a guideline with a high range of possibilities of adapting those suggestions to a specific group of learners or an individual learner with his or her very personal requirements.

In concrete terms, the example “Cleaning is dangerous” could be adapted these ways:

- Duration: Depending on the learners’ individual prior knowledges the duration of this example can vary. It is also possible to lengthen the phase of activation, depending on the interest of the group.
- Individualization: Especially the work with different charts and graphs can easily meet learners with different levels of numeracy competences. It is important to choose authentic material that meets the learners’ competences, prior skills and interest.
- Further or additional material: As mentioned in the working plan, learners can be supported by additional material just like flemo material or Montessori material. It is up to each and every teacher to choose the appropriate material for his/her group.

Our educational activities aim at numeracy skills being not only memorized, but first of all being practiced and functionally used by the learners in daily life or/and vocational situations. It is therefore recommended to implement the idea of HITS² (higher impacts of teaching skills) as far and often as possible: ...

- ... work with concrete and authentic material that learners will recognize from everyday life situations.
- ... ask the learners questions and let them raise questions themselves. It can be crucial to discuss numeracy themes, contexts and numbers.
- ... think of possible ways of transfer: in this example the learners recognize that graphs and diagrams make information easily and quickly accessible in many aeras of life. On the other hand, the learners can reflect their own behavior and how to minimize the risks for household accidents. They become aware of who to call in the case of emergency.
- ... offer differentiated learning. Depending on the prior knowledges of the learners it is important to offer diagrams in different levels of difficulty. Learners should never be discouraged with too difficult tasks.
- ... encourage collaborative learning. The analysis of diagrams is a good example for collaborative learning. Working together in small groups, learners can gather even more information from a diagram.

² for description and explanation of kinds of tasks, HITS and other background information please consult the teacher’s/user’s guide



Appendix

Appendix 1:

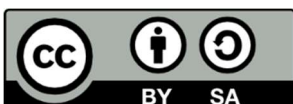
Zeitungsartikel

[01.06.2023]



Video

www.youtube.com/watch?v=mQuNBILafh4&t=9s [01.06.2023]



This work is licensed under CC BY-SA 4.0. To view a copy of this license, visit <https://creativecommons.org/licenses/by-sa/4.0/>

Appendix 2: Reihen Sie Haushaltsunfälle nach ihrer Häufigkeit.

Vergiftungen

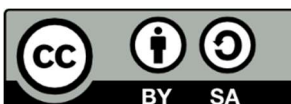
Schnittverletzungen

Elektroschläge

Stürze

Verbrennungen

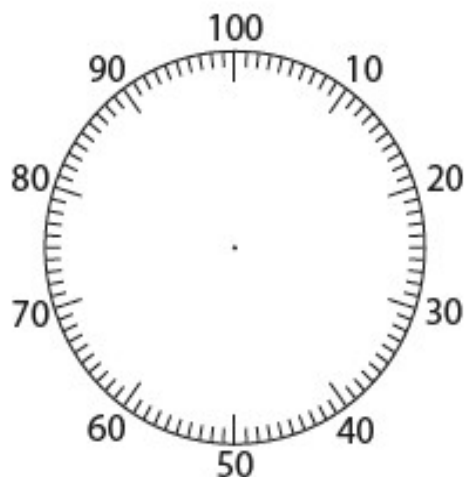
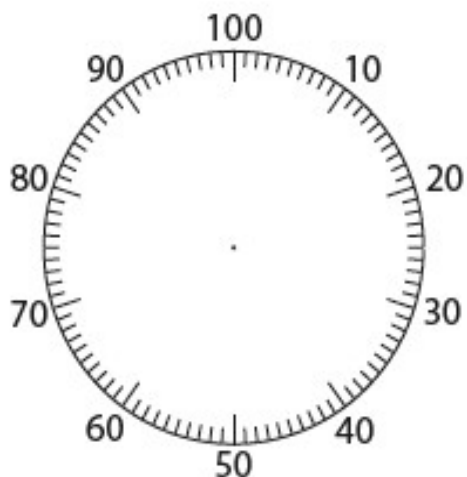
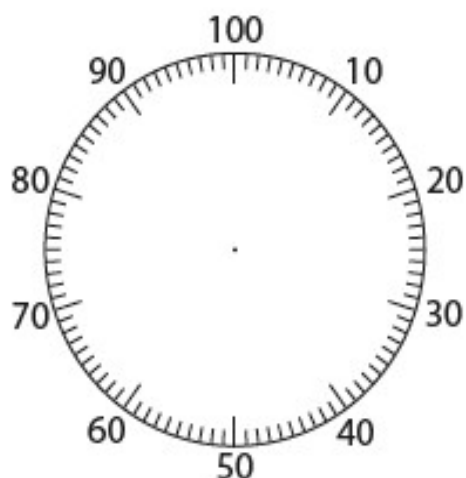
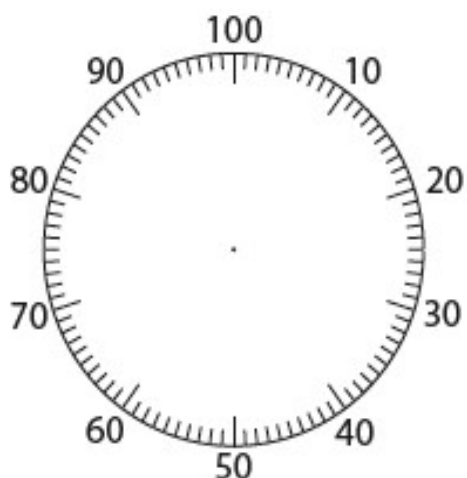
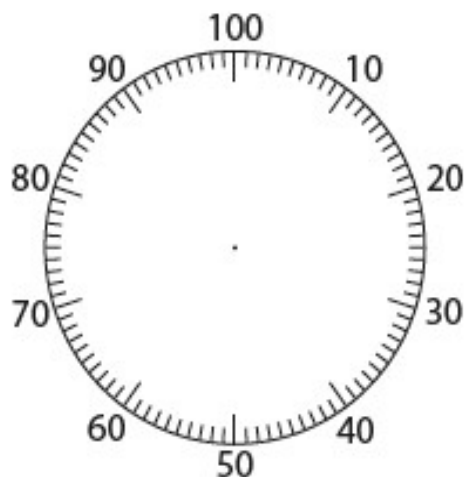
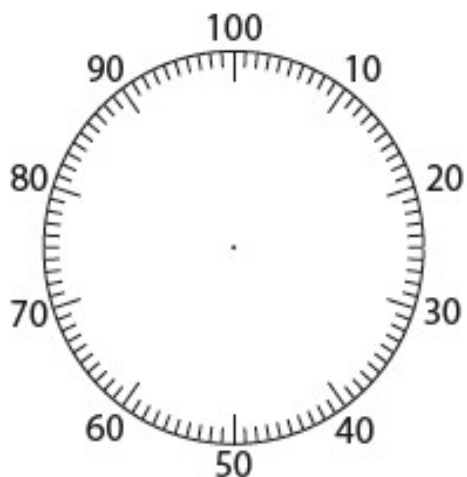
Feuer



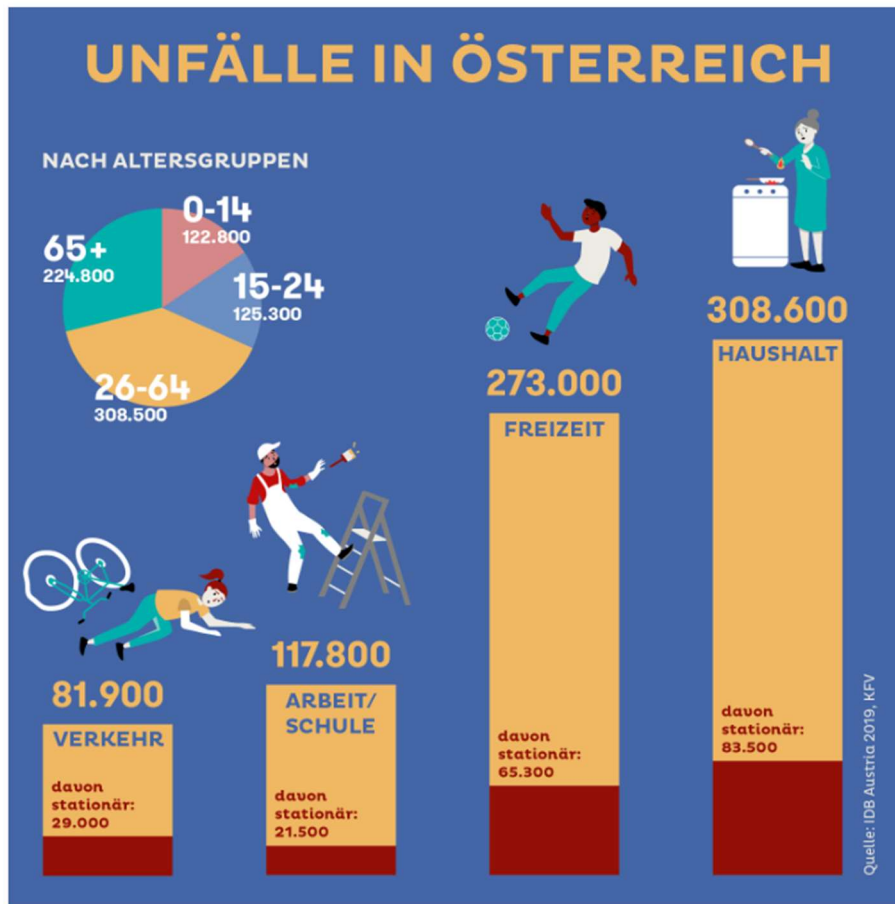
Appendix3:

Prozentrechnung | Grafische Darstellung von Prozenten

Hunderterscheiben



Appendix 4



www.mein-leben.at/mein-zuhause/verkehrzone-haushalt-unfaelle-oesterreich.html [01.06.2023]

Beantworten Sie die Fragen. Kreuzen Sie an.

Wie viele Unfälle passieren jedes Jahr im Haushalt?

- 117.800 273.000 308.600

Wo passieren am wenigsten Unfälle?

- in der Freizeit im Verkehr im Haushalt

In welcher Altersgruppe passieren die meisten Unfälle?

- 15 – 24 Jahre über 65 Jahre 26 – 64 Jahre

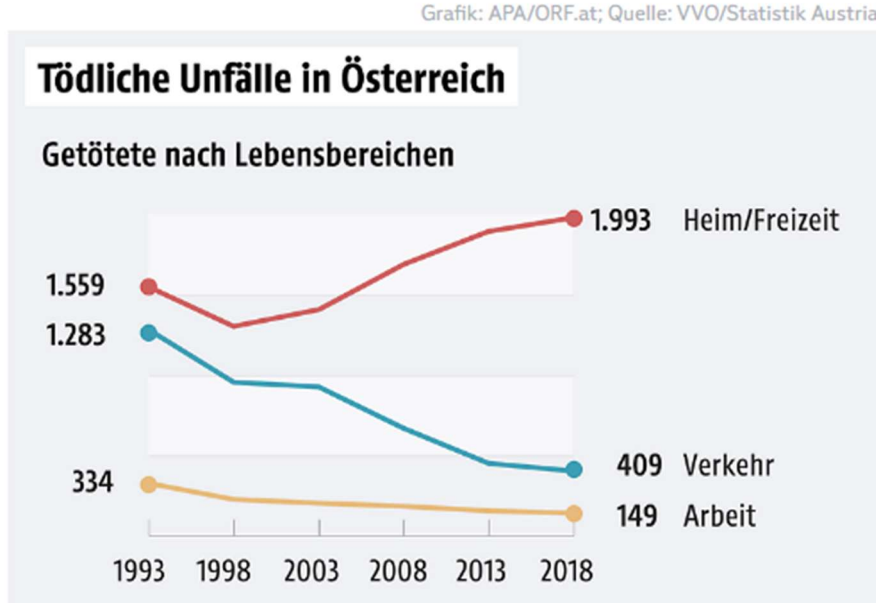
Im Verkehr passieren mehr Unfälle als im Haushalt?

- richtig falsch



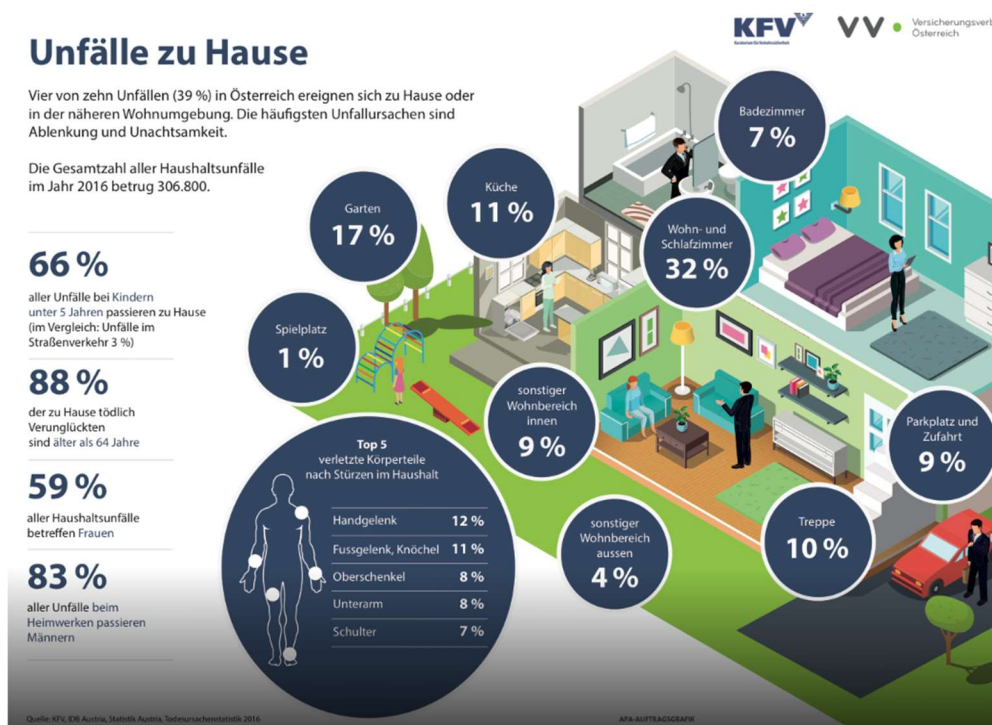
Appendix 5:

Mehr tödliche Freizeit- und Haushaltsunfälle - oesterreich.ORF.at [14.06.2023]



Appendix 6:

Haushaltsunfälle - So gefährlich sind die eigenen vier Wände | KFV - Kuratorium für Verkehrssicherheit [14.06.2023]



Appendix 7:

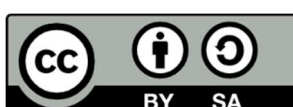
[Die häufigsten Unfälle im Haushalt - Planet Wissen - Sendungen A-Z - Video - Mediathek - WDR - Planet Wissen - Sendungen A-Z - Video - Mediathek - WDR \[14.06.2023\]](#)



Appendix 8

Broschüre:

[sicherheit-zu-hause-tipps-gegen-unfaelle.pdf \(fsw.at\) \[14.06.2023\]](#)

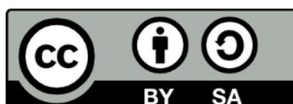


This work is licensed under CC BY-SA 4.0. To view a copy of this license, visit <https://creativecommons.org/licenses/by-sa/4.0/>

Appendix 9:

Notrufnummern in Österreich

Feuerwehr	122
Polizei	133
Rettung	144
Euronotruf	112
Gasgebreehen	128
Vergiftungen	01/ 406 43 43



This material was produced in the Erasmusplus project **Numeracy in Practice**, projectnumber 2021-1-NL01-KA220-ADU-000 026 292. In this project, 11 partners in 11 countries worked together in designing, evaluating and improving the materials. All materials can be found on the website (www.cenf.eu).



UNIVERSITAT DE
BARCELONA



Asturia vzw



D!SORA