CBSE Affiliation No. 3430369

DELHI PUBLIC SCHOOL

CHAS, BOKARO

SUMMER VACATION ACTIVITIES & ASSIGNMENTS

(SESSION: 2023-24)

Class – VIII

INSTRUCTIONS:

- In general, all the questions are to be answered in the classwork notebooks.
- Projects and activities are to be done as per the instructions given along with the questions.
- Summer Vacation assignment will be the part of Internal Assessment.

English

I. Read the passage and answer the following questions:

Water is one of the most precious gifts of nature, but it is unfortunate that we do not understand its worth and over-exploit this resource for our selfish purposes. It is a matter of serious attention that water must be conserved at all costs. We need water for daily use at home and for agriculture. Drinking water is however limited as we get it mainly from the clouds and glaciers. If this resource is used wisely, then there will be no problem. But unfortunately, it is being over-exploited. Our ever increasing population has created scarcity of water. It is predicted that by the year 2025, nearly two billion people will live in absolute water scarcity. This is a signal to be cautious enough in the use of water. Every drop of water is precious and it must not go in vain. Water shortage is a grim reality for the cities as well as villages. We need to wake up to it now than be sorry later. We must conserve water in ponds and tanks. We should try our best to use water cautiously. If we continue to use it recklessly, we will have to face dire consequences. By saving water, we will save ourselves.

1. Why is water the most precious gift of nature?
2. What is the main cause of water scarcity?
3. How do you think we can conserve water?
4. Give a suitable title to this passage.
5. What will be the result of using water carelessly?

II. On an A4 sized sheet make a poster on the theme ‘Water Conservation’ with a slogan and write an article on it in 250 words in your notebook.

II. Answer in brief :

1. Why had Damu’s excitement at meeting his sister ‘quickly soured’?
2. How do you know that Damu’s uncle, father and mother were proud of his good haul?
3. Did Sudhakaran understand Damu better at the end of the story?
4. Do you think Naushad understood Damu and knew how to get across to him? Give reasons for your answer.
5. How did Naushad and Damu feel about water?

हिंदी

1. ग्रीष्मावकाश में की गई यात्राओं का उल्लेख करते हुए लिखें कि यात्रा के दौरान आपने क्या–क्या सीखा एवं क्या–क्या सावधानियाँ बरती?
2. कक्षा में राष्ट्रमंडल खेलों से संबंधित क्विज प्रतियोगिता का आयोजन किया जाना है, उक्त क्विज हेतु दस प्रश्नों की उत्तर सहित एक सूची तैयार करें।
3. जल संरक्षण से आप क्या समझते हैं? 'जल के महत्व' का वर्णन करते हुए जल संरक्षण के उपायों को लिखें।
4. किसी एक शिक्षाप्रद कहानी की रचना स्वयं कर लिखें।

   अथवा

   अपने से एक कविता की रचना करें।

संस्कृतम्

1. जलम् एव जीवनम्। पृथिव्यां ७०% जलम् अस्ति। जलेन एव सर्वजीवानां जीवनं सम्भवति। संस्कृते जलस्य बहूनि नामानि सन्ति। यथा – उदकं, नीरं, वारि तथा च तोयम्। वयं शुद्धं जलं केवलं वर्षायाः विन्दामः। एतत् जलं नदीषु, तडागेषु, सरोवरेषु च एकत्रितं भवति। एतत् जलम् अस्माकं क्षेत्राणि उद्यानानि च सिञ्चति। नदीनां जले जलजीवाः जीवन्ति। नदीनां तीरेषु नैकानि नगराणि वर्तन्ते। जलस्य उपयोगं तु सर्वत्रैव भवति। जलेन तृष्णायाः निवारणं भवति। जलस्य पानेन शीतलता अनुभूयते, उत्साहः च वर्धते। पानाय, भोजननिर्माणाय, भोजनाय च जलस्य आवश्यकता अस्ति। स्नानाय, वस्त्रप्रक्षालनाय, गृहस्वच्छतायै च जलम् उपयुज्यते। नगरस्वच्छतायै, उद्योगेभ्यः, पशुपालनाय च जलस्य आवश्यकता अस्ति।

   प्रदत्तगद्यान्शं पठित्वा अधोलिखितान् प्रश्नान् स्वशब्देषु लिखत (15-25शब्देषु)

   I) सर्वजीवानां जीवनं कथं सम्भवति?
   II) गद्यान्शे प्रयुक्त-जलस्य पर्यायपदानां नामानि चित्वा लिखत।
   III) जलं कुत्र कथं च एकत्रितं भवति?
   IV) जलस्य उपयोगाः के-के?
   V) पानाय जलं कीदृशं भवति?

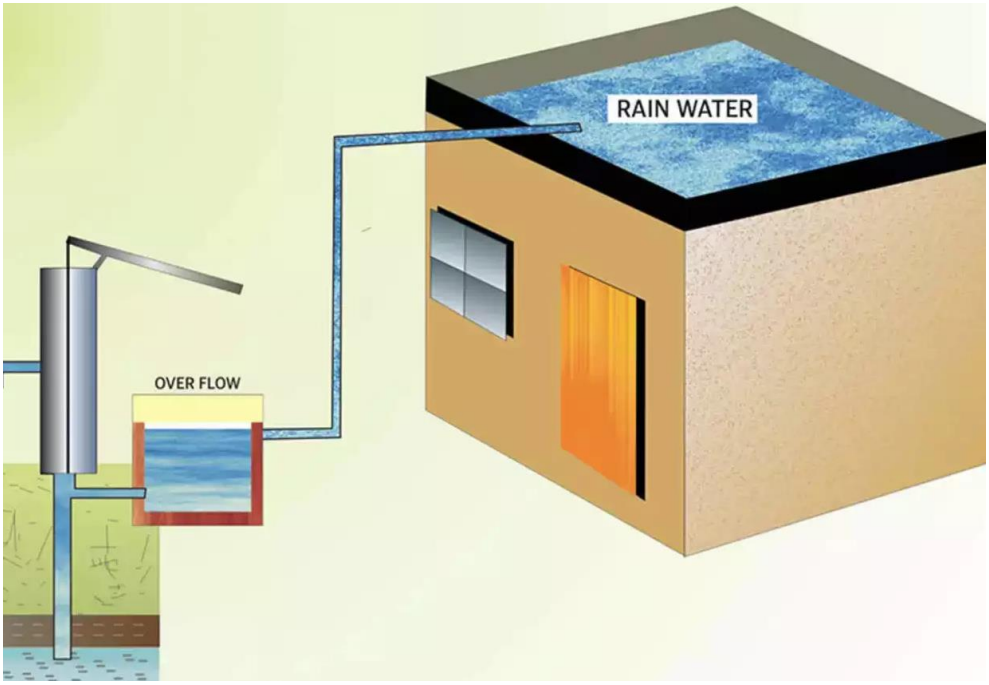
2 प्रदत्तं चित्रं दृष्ट्वा अष्टवाक्यानि लिखत।

3 जलसंरक्षणं किमर्थं कुर्यात्? स्वशब्देषु संस्कृतेन लिखत (120)

4 वंशवृक्षैः निर्मितैः वस्तूनि कानि-कानि? तेषां नामानि संस्कृतेन लिखत।

Maths

Instruction: Content based questions to be solved in the Maths class work notebook.



Save water, it will save you

In order to aware the students about water conservation, the school has taken the initiative of explaining the same to the students. During the rainy season the rain water collected at the roof top was transferred to the underground using a cylindrical pipe. If the length and breadth of the terrace is $8\frac{3}{4}$ m and $6\frac{5}{8}$ m respectively.

a. Find the area of the terrace.
b. Find the sum and difference of the length and breadth of the terrace.
c. If the level of water collected at the top is raised to 70 cm. Find the volume of the water collected at the top.

Activity:

Using the paper cutting and pasting method show that $a^m \times a^n = a^{m+n}$.

Instructions to be followed:

- Materials required: a thin white paper, a ruler, color pencils, erasers etc.
- The activity will be prepared and submitted in a project file.
- Sequence: title: laws of exponents, objective, pre requisite knowledge, materials required procedure, observation, and result.
- Cover page (school name, session, topic: summer vacation assignment, student's name, roll no., Section, subject, subject teacher's name)

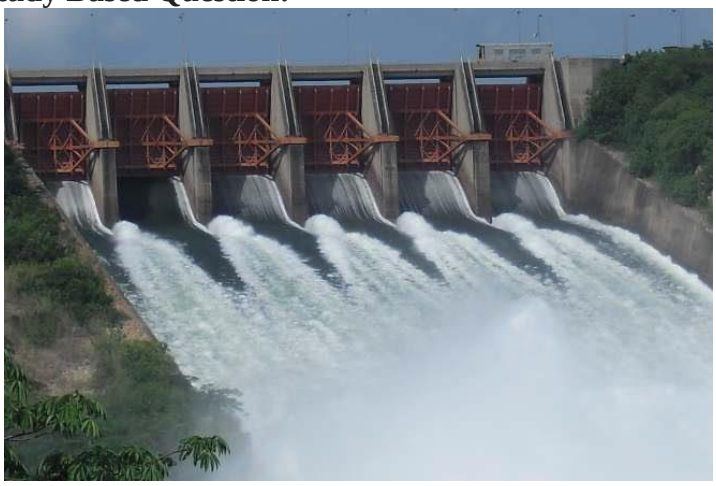
1. Find 10 rational numbers between 4 and 5.
2. Solve: $2\frac{4}{7} - 5\frac{4}{21} + 9\frac{5}{14}$.
3. What must be added to $-4\frac{4}{21}$ to get 2.

Science

PHYSICS

SECTION - A

Case study Based Question:



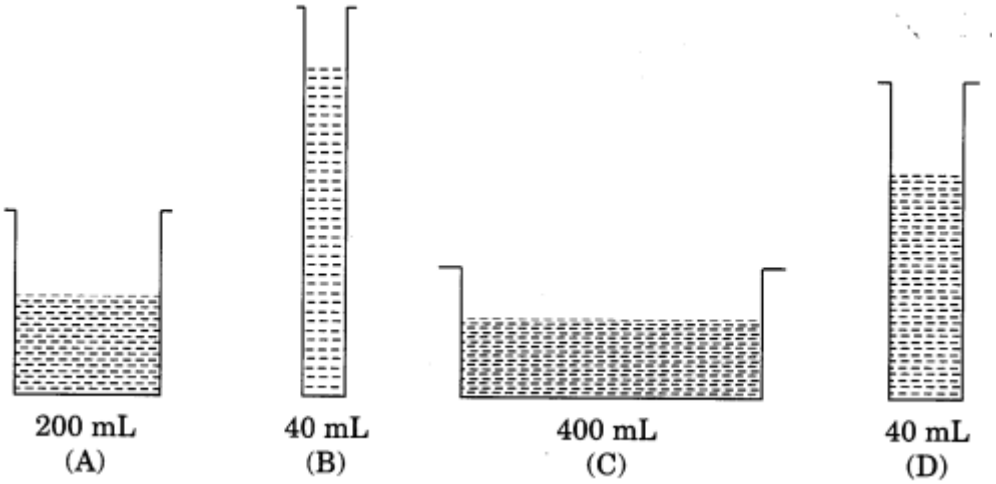
A dam is a barrier that stops or restricts the flow of water or underground streams. Reservoirs created by dams not only suppress floods but also provide water for activities such as irrigation, human consumption, industrial use, aquaculture, and navigability. Hydropower is often used in conjunction with dams to generate electricity. A dam can also be used to collect water or for storage of water which can be evenly distributed between locations. Dams generally serve the primary purpose of retaining water, while other structures such as floodgates or levees (also known as dikes) are used to manage or prevent water flow into specific land regions.

i) Why are the walls of dams are wider at the base? Explain.
ii) Derive the formula of pressure at a point inside the liquid.
iii) Name the biggest dam of India and where does it is located?

SECTION – B

Activity Based Questions:

1. Observe the figures given below carefully.



Volume of water in each vessel is shown above. Arrange them in order of decreasing pressure at the base of each vessel. Explain the reason.

2. Describe an experiment to show that air exerts pressure in all directions.

3. We observes that the wheels of buses and trucks are heavier than the wheels of car or scooters. Why?

SECTION - C

1. A force of 100 N is applied on an area of 4 m^2. Compute pressure being applied on the area.

2. What do you mean by Thrust? How does it effect the pressure?

3. Write the S.I. unit of thrust and pressure.

CHEMISTRY

1. **Case Study:** Ganga is one of the most famous rivers of India. It sustains most of the northern, central and eastern Indian population. Millions of people depend on it for their daily needs andlivelihood. However, recently a study by the World-Wide Fund for Nature (WWF) found that Ganga is one of the ten most endangered rivers in the world. The pollution levels have been rising for many years. We have reached this stage because the towns and cities, through which the river flows, throw large quantities of garbage, untreated sewage, dead bodies, and many other harmful things, directly into the river. In fact, the river is 'dead' at many places where the pollution levels are so high that aquatic life cannot survive. An ambitious plan to save the river, called the Ganga Action Plan was launched in 1985. It aimed to reduce the pollution levels in the river. However, the increasing population and industrialisation have already damaged this mighty river beyond repair. Now, the Government of India has launched a new initiative known as National Mission for Clean Ganga (NMCG) in 2016. Let us take a specific example to understand the situation. The Ganga at Kanpur in Uttar Pradesh (U.P.), has one of the most polluted stretches of the river. Kanpur is one of the most populated towns in U.P. People can be seen bathing, washing clothes and defecating in the river. They also throw garbage, flowers, idols of gods and goddesses and non- biodegradable polythene bags into the river. At Kanpur the amount of water is comparatively small and the flow of the river is very slow. In addition, Kanpur has more than 5000 industries. These include fertiliser, detergent, leather and paint industries. These industrial units discharge toxic chemical wastes into the river. Based on the above information think of the answers to the following questions:

A. What are the factors responsible for pollution of the river?
B. What steps can be taken to restore the river Ganga to its past glory?
C. How would the disposal of garbage, etc., affect the living organisms in the river?

1. Early men used to wear the leaves or the bark of the tree to cover themselves.Prepare a project report about the invention of synthetic fibres.
Instructions : This is activity has to be done in project file.

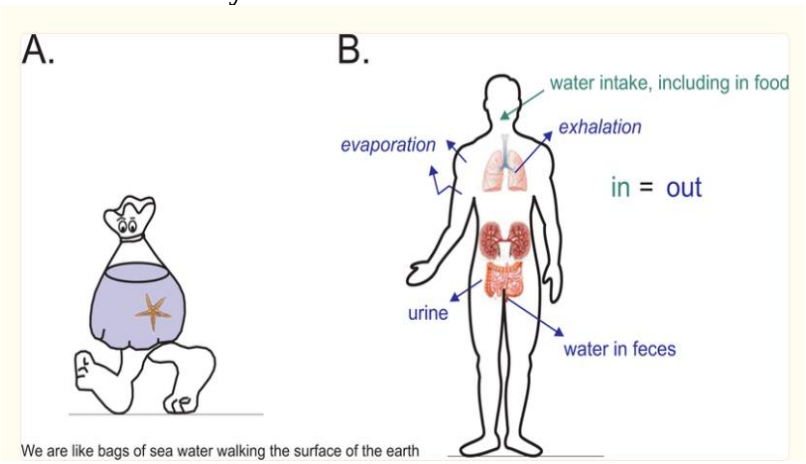
3. Despite being very useful it is advised to restrict the use of plastic.Why is it so? Can you suggest some methods to limit its consumption?

4. PVC (polyvinyl chloride) is a thermoplastic and is used for making toys, chappals, etc. Bakelite is a thermosetting plastic and is used for making electrical switches, handles of various utensils, etc. Can you write the major difference between these two types of plastics?

5. A bucket made of plastic does not rust like a bucket made of iron. Why?

BIOLOGY

1. Case Based Study:



Terrestrial species evolved from creatures that originated in the ocean.

A. As life invaded land, it carried with it some of the ocean water. The drawing was taken from the Delpire laboratory website at Vanderbilt University Medical centre.
B. In humans, and most terrestrial species, water is constantly lost through perspiration/evaporation from the skin, exhalation from the lungs, urination from the bladder, and faces from the colon. To maintain water homeostasis (in = out), an equivalent amount of water needs to be consumed through drinking and food.

i. Which cell organelle performs the water balance at cellular level?

ii. In which cases does water enter the cell passively? Write your answer in context to the given diagram.

iii. Write the components of urine. How is amount of urine released regulated?

iv. List the adaptation to conserve water in:
a) Cactus b) Camel

2. Activity Based Question :

Write the activity for potato osmometer. Paste real diagrams for hypertonic and hypotonic solution. This activity is to be done in Practical copy. For further reference visit: olabs.edu.in. The activity shall be done in stick file.

Guidelines for the project file.

a) Cover sheet b) Acknowledgment c) Index
d) Picture of experiment performed e) Theory
f) Procedure g) Conclusion

3. Write differences between along with diagram:
Prokaryotic cell v/s Eukaryotic cell
Mitochondria v/s Chlorophyll

4. Tour based questions: Describe any one region and season specific cuisine of your place of visit during the vacation.

Social Science

HISTORY & SPL

Read the following passage and select the correct option to answer the following questions.

History of Rainwater Conservation and Importance of Water Resources.

Rainwater harvesting is a simple method by which rainfall is collected for future usage. The collected rainwater may be stored, utilized in different ways or directly used for recharge purposes.

Different methods have been adopted in different areas for Rainwater Harvesting.

1. In hill and mountainous regions, people have built diversion channels like the ‘guls’ or ‘kuls’ of the Western Himalayas for agriculture.
2. “Rooftop rainwater harvesting” is commonly practiced to store drinking water, particularly in Rajasthan.
3. In the flood plains of Bengal, people developed inundation channels to irrigate their fields.
4. In arid and semi-arid regions, agricultural fields were converted into rain-fed storage structures that allowed the water to stand and moisten the soil such as ‘khadins’ in Jaisalmer and ‘Johads’ in other parts of Rajasthan.
5. The tankas are part of the well-developed rooftop rainwater harvesting system and are built inside the main house or the courtyard. This is mainly practised in Rajasthan, particularly in Bikaner, Phalodi and Barmer areas for saving the rainwater. Many houses have constructed underground rooms adjoining the ‘tanka’ to beat the summer heat as it would keep the room cool.

Tamil Nadu is the first state in India which has made rooftop rainwater harvesting structure compulsory to all the houses across the state. There are legal provisions to punish the defaulters.

According to a research by Falken Mark, a Swedish expert on water, 'water stress' happens when the water availability falls below 1000 cubic meters per person per day.
Three-fourth of the earth's surface is covered with water but only a small proportion of it accounts for freshwater that can be put to use. Water is a renewable resource.
The availability of water resources varies over space and time.

- Water scarcity is caused by over-exploitation, excessive use and unequal access to water among different social groups.
- Water resources are being over-exploited to expand irrigated areas for dry-season agriculture.
- In some areas, water is sufficiently available to meet the needs of the people. But, those areas still suffer from water scarcity due to bad quality of water.

The need of the hour is to conserve and manage our water resources:

- To safeguard ourselves from health hazards.
- To ensure food security, continuation of our livelihoods and productive activities.
- To prevent degradation of our natural ecosystems.

Select the correct options to answer the following questions -

1. "Rooftop rainwater harvesting" is commonly practiced to store drinking water in which of the following states?
   (a) Madras (b) Gujarat (c) Rajasthan (d) West Bengal .

2. Which of the following is not a cause of scarcity of water ?
   (a) over-exploitation to expand irrigated areas
   (b) unequal access to water among different social groups.
   (c) excessive use by only one class of people.
   (d) annual cycle of rainwater flow.

3. The need of the hour is to conserve and manage our water resources:
   (a) To safeguard ourselves from health hazards.
   (b) To ensure food security, continuation of our livelihoods and productive activities.
   (c) To prevent degradation of our natural ecosystems.
   (d) All of the above.

4. Two statements are given in the questions below as Assertion (A) and Reason (R). Read the statements and choose the appropriate option.
   Assertion -Tamil Nadu is the first state in India which has made rooftop rainwater harvesting structures compulsory to all the houses across the state.
   Reason - The government is really serious about solving the problem of water scarcity in Tamilnadu .
   (a) Both A and R are true and R is the correct explanation of A
   (b) Both A and R are true, but R is not the correct explanation of A
   (c) A is true, but R is false
   (d) A is false, but R is true.

5. Rainwater harvesting is a simple method by which rainfall is collected-
   (a) For the needs of the present generation .
   (b) For the requirement of the Past generation
   (c) For the need of the future generation
   (d) None of the above

6. Identify and name the following methods of conservation of water resource and write a few sentences about each:

(a)  (b)  (c) 

3. Suggest 5 ways through which you can conserve water resources or create awareness about water conservation and management in your nearby areas. Paste some relevant photographs related to the ways of water conservation.

GEOGRAPHY

1. **Read the sources given below and answer the questions:**

Several man-made activities, water pollution, and consistent poor rainfall rate have put immense pressure on India's water resources. Groundwater level, that provides 54% of India's total water needs, are dangerously plummeting. Rivers that were once crucial for agriculture and served as major resources for nearby villages and cities have dried up. Many farmers have committed suicide, a large portion of population is migrating to cities from villages. There is an evident imbalance in flora and fauna, rise in unemployment and disharmony in the society.

i. Which factors have put immense pressure on India's water resource?
ii. How much percentage of total India's water come from ground water?
iii. Why are large number of people shifting from villages to cities?
iv. What do you mean by the term 'flora' and 'fauna'?

2. **Activity based questions.**

i. Identify the above picture?
ii. What is river valley project? Why is it called so?
iii. What are the advantages and disadvantages of dams?

3. Answer the following questions.
   i. Write a short note on Sustainable Development.
   ii. According to you, which resource is more important and why?
   iii. What is meant by 'aesthetic value of resource'?

4. Make a pictorial album of the place where you have visited during the summer vacation.

Work Edu.

1. Explain any 2 types of Computer network with diagram. Use pencil to draw the diagram.
2. Differentiate between Website and Webpage.
3. What is the use of Hyperlink? What are the types of Hyperlinks?

Case Study:
Raju has asked by his teacher to see the network connection of school and explain the working of it. How the systems are connected in the school and how the resources has been shared. Raju needs to answer the following questions:

4. Which is the most efficient type of topology? What are the advantages.

5. Which networking devices are required to connect the computers in lab.

6. Project
Make a chart paper to show **"Types of Networks"** on the theme water conservation and management. Use Chart paper, Cardboards, colors and waste materials to make the chart paper.
Hint:-
Well – PAN
Pond – LAN
River – WAN

Art and Craft

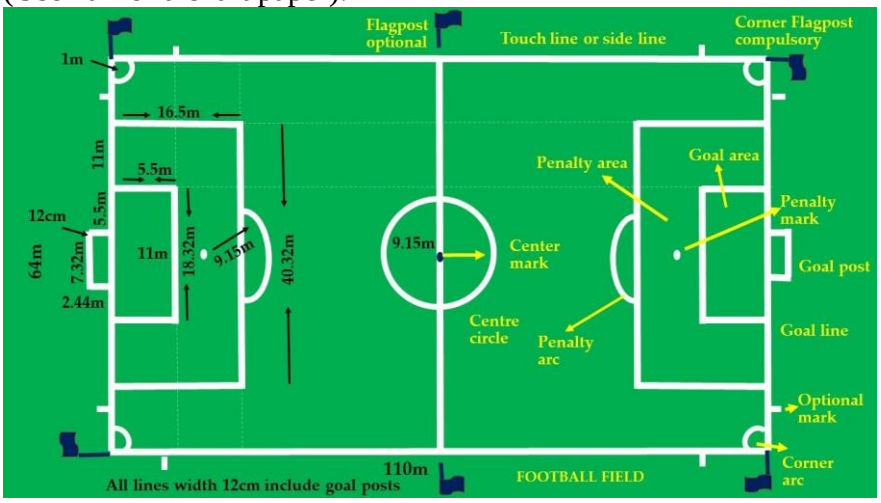
Prepare a collage on the topic 'Water Conservation and Management' on a full sheet chart paper of 22 × 28 inches. The heading must be outlined on all the four sides.

Physical Edu.

**** Prepare a project file with following contents:-**

1. Identify the game you have played with your family during summer vacation and explain the game (Within 50 - 60 words).

2. Project work - Draw this ground with its specifications and color it.
(Use half of a chart paper).



3. As a discipline in-charge explain the rules to the students in morning assembly.
Within 70 -80 words.

4. Write a short note about this game within 60 - 80 words.

5. Identify this player and write a biography of him within 70 - 80 words.

German

Beschreiben Sie die Situation.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

Er / Sie ...

...hat einen Muskelkater.
...hat Fieber.
...hat Durchfall!
...hat Zahnschmerzen.
...hat eine Erkältung.
...hat Kopfschmerzen.
...nimmt Schmerztabletten.
...hat Husten.
...hat Bauchschmerzen.
...hat Halsschmerzen.

Was machen Sie, wenn	**Sie krank sind?** **Sie Fieber haben?** **Sie eine Erkältung haben?** **...**

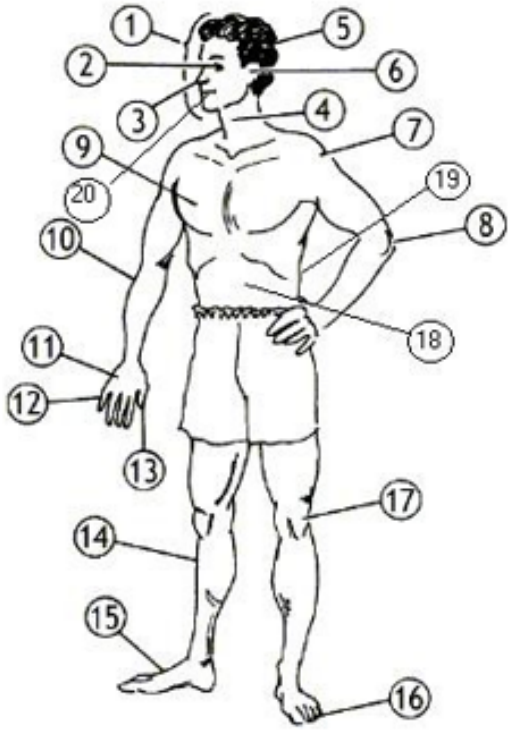
Markieren Sie.

❑ zum Arzt gehen ❑ im Bett bleiben ❑ ins Krankenhaus gehen
❑ Tabletten nehmen ❑ heißen Tee / Kaffee trinken ❑ mich duschen
❑ Tee mit Zitrone trinken ❑ mich ausruhen ❑ spazieren gehen
❑ nicht zur Arbeit / zur Uni gehen ❑ schwimmen gehen
❑ zu Hause bleiben ❑ meine Freundin / meinen Freund anrufen
❑ Gymnastik machen ❑ Yoga machen ❑ mich warm halten
❑ ... ❑ ... ❑ ...

Sprechen Sie mit Ihrem Partner / Ihrer Partnerin.

Wenn ich	krank bin,	dann bleibe ich im Bett.
	Fieber	dann ...
	habe,	dann ...

Was ist was? Schreiben Sie.



___ das Auge

___ das Bein

___ das Gesicht / der Kopf

___ das Haar / die Haare

___ das Knie

___ das Ohr

___ der Arm

___ der Bauch

___ der Daumen

___ der Ellenbogen

___ der Finger

___ der Fuß

___ der Hals

___ der Mund

___ der Rücken

___ die Brust

___ die Hand

___ die Nase

___ die Schulter

___ die Zehe

Was hatten die Personen letzte Woche?
Was mussten sie machen? Was konnten oder durften sie nicht machen?

erkältet sein

(konnte nicht …)

Rückenschmerzen haben

(konnte nicht …)

Kopfschmerzen haben

(konnte nicht …)

Magenschmerzen haben

(konnte nicht …)

Schlafstörungen haben

(konnte nicht …)

Magengeschwür haben

(konnte nicht …)

- tanzen
- sich nicht konzentrieren
- zum Arzt gehen
- Gymnastik machen
- im Bett bleiben
- atmen
- keinen Alkohol trinken
- keinen Kaffee trinken
- Tabletten nehmen
- nicht rauchen
- nicht schwimmen gehen
- nicht viel arbeiten
- spazierengehen
- Tee trinken
- ...

Erzählen Sie in der Vergangenheit. Was ist passiert? Was hatte Adrian?
krank sein - nicht gut schlafen können - Halsschmerzen haben

sich nicht hinlegen wollen - ins Büro gehen müssen

sich im Büro nicht konzentrieren können - Kopfschmerzen haben

den Arzt anrufen - einen Termin für den Nachmittag reserviere

♦♦♦