

BOTANICAL GARDES AT OULU UNIVERSITY  
GREENHOUSES  
Exercise III

**GREENHOUSE ROMEO**

Tropical and subtropical summer rain area/climate.

1. We enter the tropical rainforest.

a.) What do you see? \_\_\_\_\_  
\_\_\_\_\_

b.) Close your eyes for a moment and stand still completely quiet. What does the rainforest feel and smell like? \_\_\_\_\_  
\_\_\_\_\_

c.) What kind of sounds could you hear in a rainforest? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Tropical rainforests exist in every continent which belongs to the tropical climate area. Where are the largest rainforests (a,b,c)? Name the drawn latitude in the picture.

- a.) \_\_\_\_\_
- b.) \_\_\_\_\_
- c.) \_\_\_\_\_



3. Stars walking clockwise. Stop for the little pond and examine the plants in the water and close by it. What water plant is....

- a.) floating aquatic plant, which stays on the surface thanks to bloated stem? \_\_\_\_\_
- b.) nymphaeid (leaves floating), which close relative you can find by summer cottage shore?  
\_\_\_\_\_
- c.) helophyte, which is important food plant? \_\_\_\_\_

4. From greenhouse Romeo you can find many useful plants for human. Many of those plants have been spread from the original planting place to a wider area.

a.) Fill in the form.

b.) For the last line you can collect the information from a plan you want.

PLANT	RANGE (look the name tag)	USE OR PRODUCT	LEAF
			
			
SUGAR CANE <i>Saccharum officinarum</i>	TROPICAL SOUTHEAST ASIA		
			
		SPICE	

c.) Tell your friend, what products you have use today that are originally from plants?

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**GREENHOUSE JULIA**  
Subtropical winter rain area/climate.

5. a.) Find among these plants something, which is:

sharp: \_\_\_\_\_

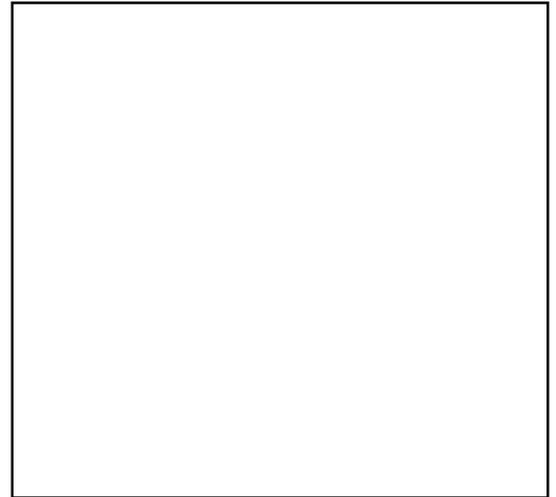
round: \_\_\_\_\_

hairy: \_\_\_\_\_

ugly: \_\_\_\_\_

beautiful: \_\_\_\_\_

b.) draw the prettiest plant or plant part. →



6. Succulents and xerophytes (dry area plants like cactuses) are originally from deserts or semi-deserts.

a.) Examine plants in this area and write down, how are they adapted to the dryness?

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b.) Cactuses are large and diverse plant group. Their appearance differs, but usually they have in common thick succulent stem and spikes.

What are the spikes actually and what use are they for the plant?

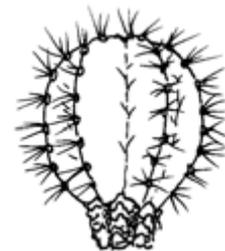
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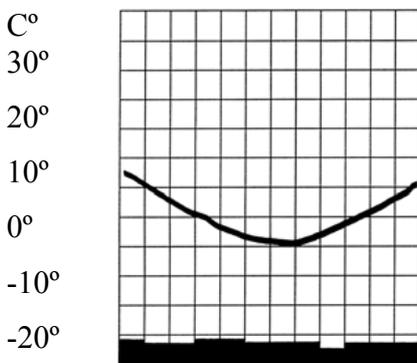
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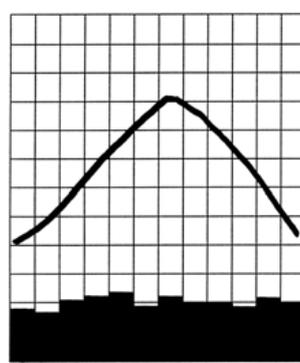
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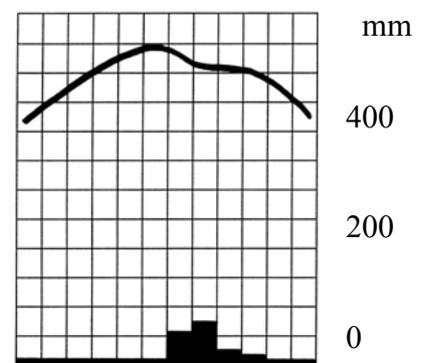
7. Temperature and rainfall are major impact to the vegetation. Temperate climate life zones/vegetation zones are example taiga and hemiboreal forests. Which of the following climate diagram represents temperate climate conditions? \_\_\_\_\_



J F M A M J J A S O N D  
Punta Arenas, Chile



J F M A M J J A S O N D  
New York, USA



J F M A M J J A S O N D  
Khartoum, Sudan

mm  
400  
200  
0

**ANSWERS:**

2.a) Amazonas, South America

b.) Africa in the equator

c.) Southeast Asia

Drawn latitude is the Equator.

3. a) vesihyasintti, *Eichhornia crassipes*, water hyacinth

b.) allaslumme, *Nymphaea*, water lilies

c.) rice

6a.) Plants store water to the stem, roots and leaves. And protect them self from excessive evaporation (spikes, hair...)

b.) Spikes are abortive leaves.

-protect from herbivores

-help for spreading

-spikes form a layer around the plant where the evaporation is minor (wind protection)

-protection layer for the sun

7. New York

PLANT	RANGE (look the name tag)	USE OR PRODUCT	LEAF
PINEAPPLE	TROPICAL AMERICA		
COTTON	TROPICAL AMERICA		
SUGAR CANE <i>Saccharum officinarum</i>	TROPICAL SOUTHEAST ASIA	SUGAR	
CACAO	TROPICAL AMERICA		
PEPPER	SOUTH ASIA	SPICE	