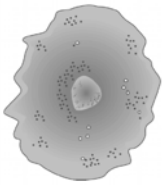
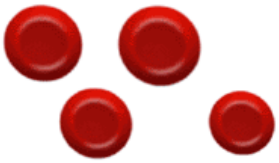
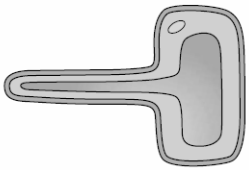
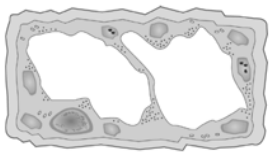
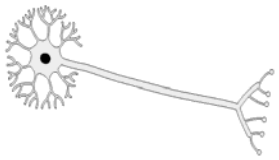
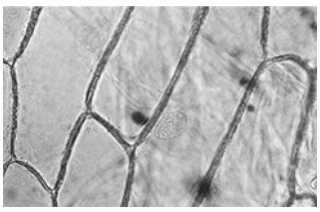
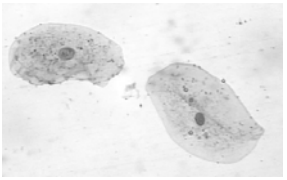
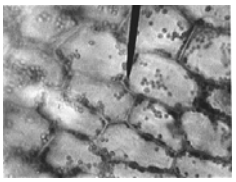
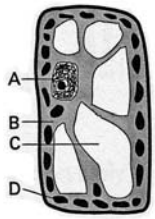
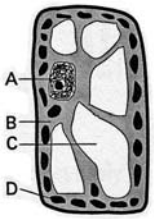
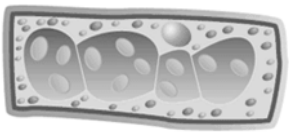
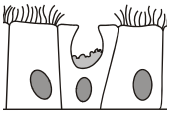
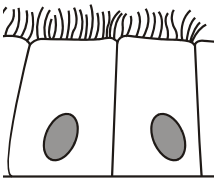
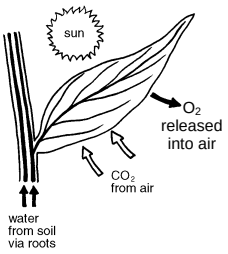
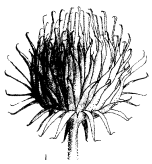
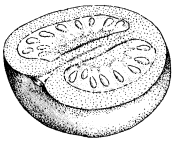
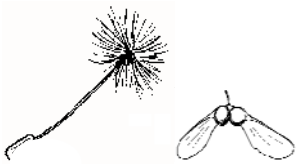
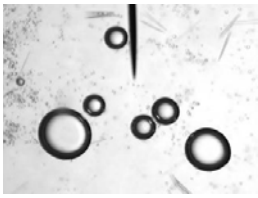
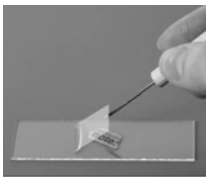
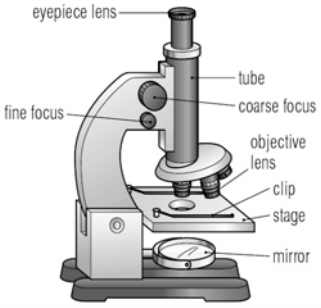
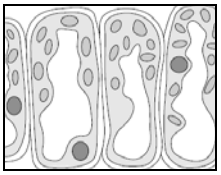
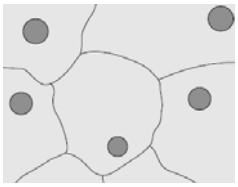
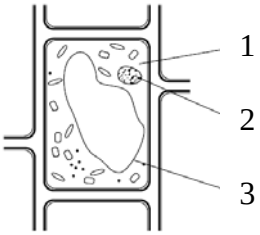
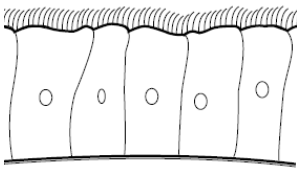
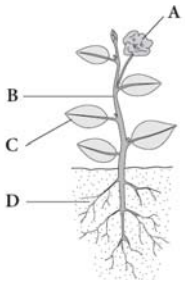
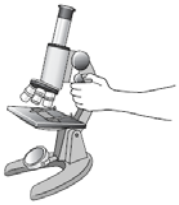
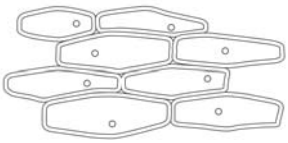
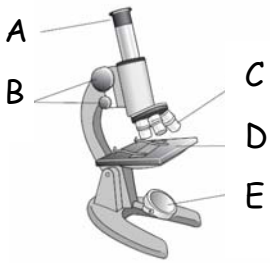
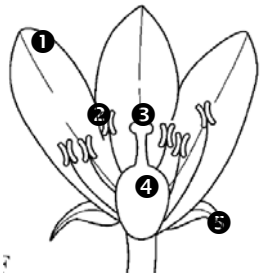
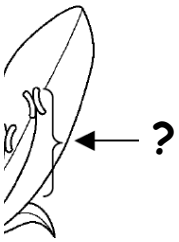
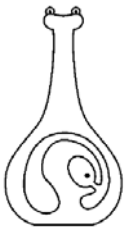
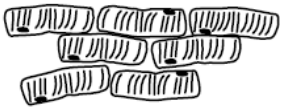
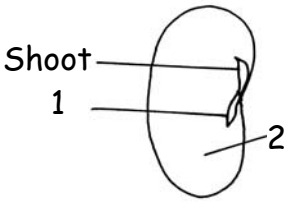
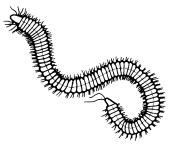
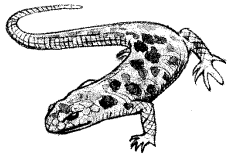
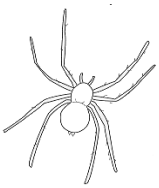
 plant or animal cell?	 these ___ ___ cells carry ___	 what cell?	 what cell?
animal cell	**red blood oxygen**	**sperm**	**root hair cell (of plant)**
 plant or animal cell?	 cell, tissue or organ?	 what cell?	 paramecium, amoeba or hydra?
plant cell	**tissue**	**nerve cell**	**paramecium**
 what is this a sample of?	 what cells?	 what cells?	 what are the green structures?
pond water	**onion cell / epidermis**	**cheek cells**	**chloroplasts**
 identify A & B	 identify C & D	 plant or animal cell?	in plants, the _____ contains a liquid called cell sap, which keeps the cell firm
A – nucleus **B – cytoplasm**	**C – vacuole** **B – chloroplast**	**plant cell**	**vacuole**

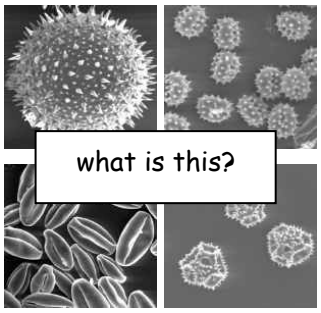
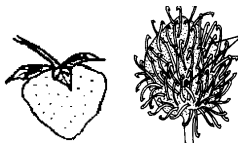
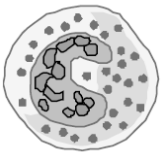
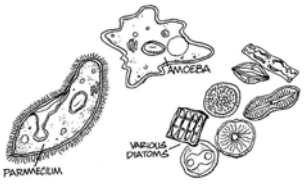
__ __ is made of a tough substance called **cellulose**, & supports the plant cell	3 things that animal cells and plant cells **both** contain	making more living things of the same type (MRSGREN)	how our bodies increase in size and is related to how our systems increase in complexity (MRSGREN)
cell wall	**cell membrane, cytoplasm, nucleus**	**reproduction**	**growth**
detecting changes in the surroundings (MRSGREN)	getting rid of waste (MRSGREN)	go to/away from things (MRSGREN)	involves a reaction between oxygen (breathed in) and food to produce energy (MRSGREN)
sensitivity	**excretion**	**movement**	**respiration**
 for the female reproductive cell is an __ __	 what do these 2 cell types lining the airway leading to the lungs do?	 what cells are these?	the process of making, getting and using food (MRSGREN)
egg cell	**make mucus / cilia sweep mucus and dirt away from lungs**	**(ciliated) animal cells**	**nutrition**
a **group of cells** with a similar structure and function, which all work together to do a particular are called …	a **group of different tissues**, which all work together to do a particular job are called …	a group of different organs, which all work together to do a particular job are called …	animal cells generally have a more *regular / irregular shape* that plant cells
a tissue	**an organ**	**an organ system**	**irregular**

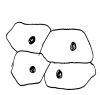
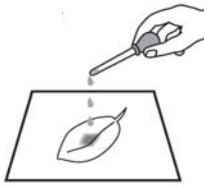
three things plants need for photosynthesis	***put the levels of organization in ascending order*** organ / tissue / cell organism / organ system	plant cells generally have a more *regular / irregular shape* that animal cells	 name the process
carbon dioxide, water & light	**cell, tissue, organ, organ system and organism**	**regular**	**photosynthesis**
method of seed dispersal 	method of seed dispersal 	method of seed dispersal 	method of seed dispersal 
carried by an animal	**eaten and excreted or partly eaten & dropped**	**carried by the wind**	**thrown by explosion**
method of seed dispersal  **(coconut)**	method of seed dispersal 	these are found on the nosepiece and range from low to high power	this part holds the objective lenses and is able to rotate to change magnification
floats in water	**carried by an animal**	**objective lenses**	**revolving nosepiece**
projects light upwards through the hole in the stage to allow you to see the specimen	microscope part that moves the stage up and down to get the specimen into view clearly	microscope part that moves the stage slightly "fine" tune the view of the specimen.	 identify these
mirror / lamp	**coarse focus knob**	**fine focus knob**	**air bubbles**

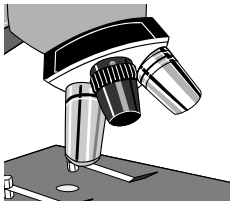
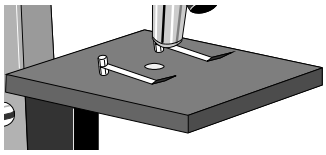
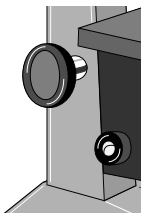
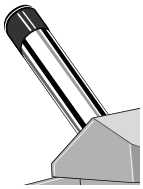
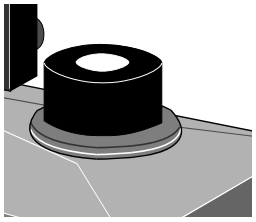
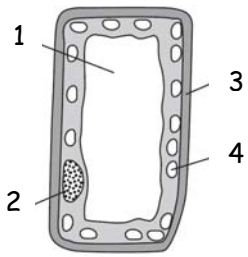
 lower cover slip gently to avoid….		 muscle or nerve cell?	 plant or animal cells?
air bubbles	**light microscope**	**muscle cell**	**plant**
 plant or animal cells?		 plant or animal cells?	
animal	**1-cytoplasm, 2-nucleus, 3-vacuole**	**animal (cells lining windpipe)**	**A – flower, B – stem, C- leaf, D - root**
 what is being done wrong here?	 x 100 identify these cells		
carry with 2 hands	**onion (epidermis) cells**	**A-eyepiece, B-focus knobs, C – (objective) lens, D-stage, E-mirror**	**1-petal, 2-anther, 3-stigma, 4-ovary, 5-sepal**
	what are the stigma, style & ovary collectively known as?	seed _____ means spreading the seeds away from the parent plant	 ___ ___ land on ___
stamen (male part of flower)	**carpel/pistil (female part of flower)**	**dispersal**	**pollen (grains) land on stigma**

give 3 reasons why plants need to spread their seeds	smallest unit of a living thing	 **Pollen tube enters the ___**	 Pollen tube grows through the ___
less competition for light, water, space and nutrients	**cell**	**ovule / egg**	**style**
the main material inside a cell; cell reactions occur here	made of different tissues joined together:	 a _____ is made of cells that are similar	holds the cytoplasm together & controls entry/exit of substances from the cell
cytoplasm	**organ**	**tissue**	**cell membrane**
part that keeps a plant cell in shape & gives it support	the structure that controls the cell & its activities	this part of a cell absorbs light energy for photosynthesis	female sex cell is found in plants
(cellulose) cell wall	**nucleus**	**chloroplast**	**ovule / egg**
 parts of a seed	male sex cell found in plants	the transfer of pollen grain from the anther to stigma of another plant	_____ is contained in disc shaped organelles called **chloroplasts**
1-root, 2-food store	**pollen**	**(cross) pollination**	**chlorophyll**

animals with moist skins that lay eggs in water and are cold blooded	animals with feathers that are warm blooded and lay eggs with hard shells	animals with dry scales that are cold blooded with eggs that have leathery shells	 animals without backbones are called ____
amphibians	**birds**	**reptiles**	**invertebrates**
 animals with backbones are called ____	 what group of invertebrates?	 what group of invertebrates?	 what group of invertebrates?
vertebrates	**insects**	**arachnids**	**molluscs**
what are some ways flowers encourage insects to visit to bring about pollination?	*fertilisation* *flower formation* *germination* *growth* *pollination* *seed dispersal* Put in order (starting with germination)	four different ways that seeds can be dispersed	the 3 body parts of insects are ___, ___ & ___
petal colour, scent, nectar	**germination, growth, flower formation, pollination, fertilisation, seed dispersal**	**wind, water, animals, explosive fruits**	**head, thorax, abdomen**
protective coverings on the outside of the flower – usually green	inside sepals and often coloured to attract pollinating insects	produces sugary liquid that attracts insects at base of petals	flower male sex organs that produce pollen (anther + supporting filament)
sepals	**petals**	**nectary**	**stamens**

flower female sex organ that produce ovules (ovary + style + stigma)	pollen transferred from anther to stigma of SAME plant	pollen transferred from anther to stigma of DIFFERENT plant	occurs when the nucleus from a pollen grain joins with nucleus of an ovule
carpel / pistil	**self pollination**	**cross pollination**	**fertilisation**
after fertilisation the petals fall off and the ovary becomes a _____	describe the pollen in wind pollinated plants	describe the petals in wind pollinated plants	
fruit	**small, light, smooth, plentiful**	**small and green**	**pollen (grains)**
 how does the squirting cucumber disperse seeds?	 what do these have in common?	 what cell fights off disease?	 what feature(s) could be used to distinguish these Mr Men?
explosive fruit	**seeds distributed by animals**	**white blood cell**	**hat colour / shape, body shape, nose, mouth**
what feature(s) could be used to distinguish these Mr Men? 	 what kingdom do these belong to?	 what kingdom do these belong to?	 what is released from the mushroom
Hat colour, glasses, body shape	**fungi**	**protist**	**spores**

which looks most like onion cells? 1  2 3   4	 what is used to test a leaf for starch?	what three things are absent in animals cells but present in plants cells?	cell organ organism system tissue ***Put in order of simplest → complex***
3	**iodine**	**cell wall, large vacuole, chloroplasts**	**cell, tissue, organ, system, organism**
plant cells are more _____ in shape than animal cells	what inorganic molecules do plants need for photosynthesis?	what plant part holds up the leaves & transports water up the plant and food down from the leaves?	what is the function of the roots of the plants?
regular	**carbon dioxide and water**	**stem**	**hold the plant in the soil & absorb water and minerals**
what part of a plant carries out photosynthesis to produce food (glucose)	why do plants produce flowers?	what chemical do plants store glucose as?	what is the name for the green pigment found in plants leaves where photosynthesis occurs?
leaf	**to produce seeds/for plant reproduction**	**starch**	**chlorophyll**
what chemical is used to test for the presence of starch?	if starch is present in a leaf what colour will it go when tested with iodine?	Scrape inside of cheek gently with an ice block stick. Dab the end on a slide. Add a drop of methylene blue stain. Carefully lower coverslip to avoid air bubbles.	Take a thin layer of onion epidermis Lie it flat on a slide Add a drop of stain (iodine) Carefully lower coverslip to avoid air bubbles
iodine	**blue/black**	**making a slide of cheek cells**	**making a slide of onion cells**

 name this type of slide	microscope parts 	microscope parts 	microscope parts 
cavity slide	**revolving nose piece and objective lenses**	**stage & clips**	**coarse and fine focus knobs**
microscope parts 	microscope parts 	flower part made up of the anther (make pollen) and filament – male part of flower	flower part cell found in ovary that will become a seed if it is fertilised
eyepiece and barrel	**lamp (mirror in some microscopes)**	**stamen**	**ovum / egg**
flower part made up of the anther (make pollen) and filament – male part of flower	flower part small green leaves that surround the flower when it is "in bud"	seed dispersal is important to avoid competition with the parent plant for ___, ___ & ___	when the pollen grain joins with the ovum (egg) this is known as ___
stamen	**sepals**	**light, water, nutrients**	**fertilisation**
features of plants that attract insects to carry out pollination	the transfer of pollen from anther to stigma is known as ___	wind, water, animals (eaten & stick to fur) and explosive fruits are all methods of ___ ___	
coloured petals, scent & nectar	**pollination**	**seed dispersal**	**1. vacuole 2. nucleus 3. cell wall 4. chloroplast**

what 3 things do seeds need for germination? (for seed to sprout)	seeds need soil to germinate, true or false?	name for seed beginning to sprout a root and shoot	why must a seed have a food store?
warmth, water, oxygen	**false**	**germination**	**food for growth until it can make leaves and start to photosynthesise**
Put the organisation of living things in the correct order: class, family, genus, kingdom, order, phylum, species	what are plants, animals, fungi, protists, eubacteria and archaebacteria know as?		
kingdom phylum class order family genus species	**the (6) kingdoms**		

Spare cards are provided for you to make any additional cards you need.