STATION 1 VOCABULARY

STATION 2 DNA

Make sure you know what each of these words mean. If you know, check the box. If you don't, ask someone in your group and write down the definition	What does the acronym 'DNA' stand for?
☐ Amino acid	
☐ Asexual reproduction	
☐ Binary fission	What is the complimentary base pair for the following
□ Blastocyste	strand of DNA?
\square Budding	
☐ Cell Cycle	ACTGATGGCGATTAATCGC
☐ Centromere	
☐ Chromatid	
☐ Chromatin	
☐ Chromosome	
☐ Daughter cell	
□ Diploid	Draw and label a nucleotide.
\square DNA	
☐ Embryonic stage	
☐ Fertilization	
☐ Fetal stage	
☐ Fragmentation	
☐ Gametes	
☐ Grafting	
☐ Haploid	
☐ Meiosis	Milest is the vale and numbers of DNA?
☐ Mitosis	What is the role and purpose of DNA?
□ Nucleotide	
☐ Parent cell	
☐ Sexual reproduction	
☐ Spindle fibre	
□ Spores	
☐ Vegetative Propagation	
□ Zygote	

STATION 3 ASEXUAL REPRODUCTION

STATION 4 CELL CYCLE

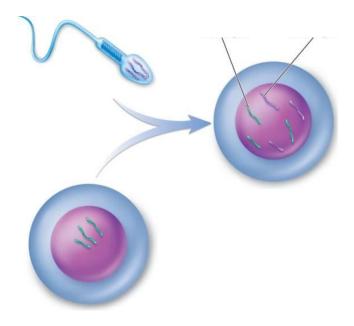
1.	What are the advantages of asexual reproduction?	1.	Identify the three main stages of the cell cycle.
2.	What are the disadvantages of asexual reproduction?	2.	Identify which phase of the cell cycle each of the following statements is describing: a. DNA condenses into chromosomes
	Identify how the following organisms are able to asexually reproduce:a. Bacteria:b. Yeast:		b. Cell grows and develops
			c. Nuclear membrane reappears around the chromosomes
	c. Starfish: d. Mold:		d. DNA is copied
4.	e. Strawberries: Describe what would happen to a population that reproduces through asexual reproduction if a new disease were to enter into the population.		e. Chromosomes line up across the middle of the cell
			f. Duplicated chromosomes are pulled apart to the opposite ends of the cell

SEXUAL REPRODUCTION

1. Determine how many chromosomes are in the gametes and body cells of the following organisms:

Organism	Number of chromosomes in the gametes	Number of chromosomes in the body cells
Dog		78
Housefly		12
Cow	30	
Deer	35	

- 2. What process must cells undergo in order to produce gametes?
- 3. Label the following diagram with the following terms: sperm cell, egg cell, zygote, haploid, diploid, maternal chromosome, paternal chromosome



STATION 6

MEIOSIS

- 1. Which stage of meiosis does each of the following statements describe?
 - a. Nuclear membrane starts to disappear and homologous chromosomes pair
 - b. DNA condenses into chromosomes
 - c. Two nuclei are formed
 - d. Chromosomes separate and move to opposite ends of the cell
 - e. Homologous chromosomes line up in two lines in the middle of the cell
 - f. DNA exists as chromosomes but not as homologous pairs
- 2. In order for chromosomes to move, they need help from structures in the cell.
 - a. Which structure helps these chromosomes move in the cell?
 - b. Where do these structures attach to on the chromosome?
- 3. What is the end result of meiosis?