

# **MCAS High School Biology**

# Sample Blank Reference Sheet for Students with Accommodation A9

#### **INSTRUCTIONS:**

The following sample reference sheet is ONLY for students who have accommodation A9 listed in their IEP or 504 plan.

#### Before testing:

Schools should print out the following pages (or a reference sheet that has been submitted to and approved by the Department) and distribute to students who have accommodation A9 so that students can practice using the reference sheet. Schools should also remind students that during testing they may only use a reference sheet that has not yet been filled in.

#### **During testing:**

At the start of each test session, test administrators should check that that they are only providing reference sheets that have not already been filled in, and that they are providing them only to students who have accommodation A9 in their IEP or 504 plan.

Test administrators should remind students that they may not use any sheets that were filled in previously, nor any other reference materials or notes. Results **may be invalidated** for students who use a reference sheet that has already been filled in.



# **MCAS High School Biology**

# Sample Blank Reference Sheet for Students with Accommodation A9

Note: Students may ONLY be provided with a blank reference sheet to use during testing.

Molecule         Building Blocks         Elements         Functions           C         L         P         C	Molecules to Organisms: Structures and Processes							
C       L         P       NA         NA - ACGT NA - ACGU       Mitosis         # chromosomes in parent cell # chromosomes in resulting cells types of cells produced       # chromosomes in resulting cells types of cells produced         C + W + S → G + O       + O         Body System Organs/Structures Function(s)         Circulatory Digestive Excretory         Nervous	Elements: C	F	l	N	0	P_		_S
L P NA  NA - ACGT NA - ACGU  # chromosomes in parent cell # chromosomes in resulting cells types of cells produced  C + W + S G + O  Function(s)  Circulatory  Digestive Excretory  Nervous		1	Build	ing Blocks		Elements		Functions
P  NA  tc  tc  Mitosis  Mitosis  # chromosomes in parent cell # chromosomes in resulting cells types of cells produced	С							
NA — ACGT NA — ACGU  # chromosomes in parent cell # chromosomes in resulting cells types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W  Body System Organs/Structures Function(s)  Circulatory Digestive Excretory Nervous	L							
tc tl  Cell Cycle  Mitosis  NA – ACGT  NA – ACGU  # chromosomes in parent cell  # chromosomes in resulting cells  types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W  Body System Organs/Structures Function(s)  Circulatory  Digestive  Excretory  Nervous	Р							
NA - ACGT NA - ACGU  # chromosomes in parent cell # chromosomes in resulting cells types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W  Body System Organs/Structures Function(s)  Circulatory Digestive Excretory Nervous	NA							
NA - ACGU  # chromosomes in parent cell # chromosomes in resulting cells types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W  Body System Organs/Structures Function(s)  Circulatory  Digestive Excretory  Nervous			tc	<b>—</b>		]	tl	Cell Cycle
NA – ACGU  # chromosomes in parent cell  # chromosomes in resulting cells  types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W  Body System Organs/Structures Function(s)  Circulatory  Digestive  Excretory  Nervous						Mitosis		NA
types of cells produced  C + W + S → G + O  G + O → E ( ) + C + W   Body System Organs/Structures Function(s)  Circulatory  Digestive  Excretory  Nervous		# c	hromosom	es in parent	cell			Gi
C         + W         + S         → G         + O           G         + O         → E         ( ) + C         + W    Body System Organs/Structures Function(s)  Circulatory  Digestive  Excretory  Nervous		# c	hromosom	es in resultin	ig cells			
G         + O         → E         ( ) + C         + W           Body System         Organs/Structures         Function(s)           Circulatory         Digestive           Excretory         Nervous		typ	es of cells	produced				S
Body System Organs/Structures Function(s)  Circulatory  Digestive  Excretory  Nervous	С	_+ <u>W</u>		+ <u>S</u>	>	G	+ <u>o</u>	
Circulatory  Digestive  Excretory  Nervous	G	+ 0		→ <u>E</u>	() + <u>c</u>		+ <u>W</u>	
Digestive Excretory Nervous	Body System	Organs	/Structure:	S	Fund	ction(s)		
Excretory Nervous	Circulatory							
Nervous	Digestive							
	Excretory							
Respiratory	Nervous							
	Respiratory							



# **Heredity**

# # chromosomes in parent cell # chromosomes in resulting cells types of cells produced

Punnett square

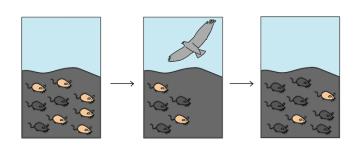
each square = \_\_\_\_%

Gametes are \_\_\_\_\_ cells and \_\_\_\_\_ cells, which are h\_\_\_\_ cells.

Fertilization results in a <u>z</u> which is a <u>d</u> cell.

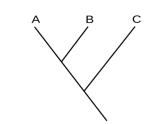
Changes in the sequence of nucleotides in a cell's DNA are called m\_\_\_\_\_.

## **Evolution**



Dark-colored mice were more likely to \_\_\_\_\_

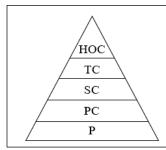
and \_\_\_\_\_\_ because of \_\_\_\_\_\_.



Species A is more related to Species \_\_\_\_

than to Species \_\_\_\_.

# Ecology



A food web is a model that shows the flow of \_\_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_ .

10% Rule: Approximately 10% of \_\_\_\_\_ is available to the

M = (+,+)

C = (+,0)

P = (+,-)

Biodiversity increases when there are \_\_\_\_\_\_ species and \_\_\_\_\_ individuals.



## **Carbon Cycling**

Process	Carbon In? In what form?	Carbon Out? In what form?
Photosynthesis		
cellular respiration		
Decomposition		
Combustion		

### **Science Prefixes**

auto – self	hetero – different	pheno – physical
di – two	homo – same	poly – many
geno – genes	multi – many	uni – one

# **Science Practices**

What is the Claim?

What is the Evidence?

What is the Reasoning?

Was data asked for in the question? Did you include it in your answer?

If asked to provide a question, is it a testable question?

\* If this sample reference sheet is used as is, or if text is *removed*, additional Department approval is NOT necessary. If information is *added*, or if a different reference sheet is created, the reference sheet must be submitted for Department approval.