### **Escape ALIVE**

# **YOUR CHALLENGE:**

Your best friend's cells have mutated into the "zombie virus." The cure is locked in away in a nearby location. You must quickly answer these puzzles about prokaryotic and eukaryotic cells to get your hands on the cure. Otherwise, your friend will be doomed to be a brain-eating zombie forever. Don't waste time - he's counting on you!

YouTube Link https://youtu.be/dp1AWxEI1FA

Digit Lock Link Below:

https://docs.google.com/forms/d/e/1FAIpQLSdMOkyP9RxvOX6Qk0w9ohNdwOipLBiXyDPIUsnM3kR8umbUyA/viewform

## Puzzle 1:

I fall into a gray area between liing and nonliving thing.
I am not a cell. I am just a piece of DNA or RNA (never both), surrounded by a protein coat called a capsd.
I am a thousand times smaller than even a bacterium and can exist in a wide variety of shapes and forms.
I am often described as "obligate intracellular paasites" because I must be inside a living cell to reproduce and the relationship with my host is parasitic (the guest benefits at the expense of the host).
I are <i>not</i> made of cells, and do <i>not</i> obtain or use energy to run metabolic activities (I do <i>not</i> have a metabolism because I are just a particle). I do <i>not</i> grow in size or develop over a lifetime from a juvenile to mature. I do <i>not</i> have the ability to respond to a stimlus in their environment, and do <i>not</i> maintain homeostasis as living cells do when they exchange gases, expel waste, or take in food and water.
I do have genes that can mutate and give myself a new characteristic that might allow me to have an advantage in my environment. I do "reproduce," but am not capable of doing this independently, and I do not divide as a cell does using mitois or binary fission. Making more of me is called replication rather than reproduction because I take over a living cell and use the cell's existing machinery to make copies of myself by assembling more pieces of nucleic acids and protein coats.

## Puzzle 2:

1 lipid floating in proteins		protein floating in lipids	
3 cell membrane	Human Structures alveoli kidney large intestine	Functions  absorption of oxygen, excretion of carbon dioxide excretion of salts and nitrogenous wastes absorption of water	4 nucleus
5 active transport diffusion		6 insertion deletion	
7 diffusion	Mem	on of Movement of Molecules  hbrane  Side A Side B	8 active transport
1 Receptor Molecule	Nerve cell X & A A A A A A A A A A A A A A A A A A	Nerve cell Y  Hormone  Nontarget Cell  Target Cell	2 Channel Protein

#### Puzzle 3:

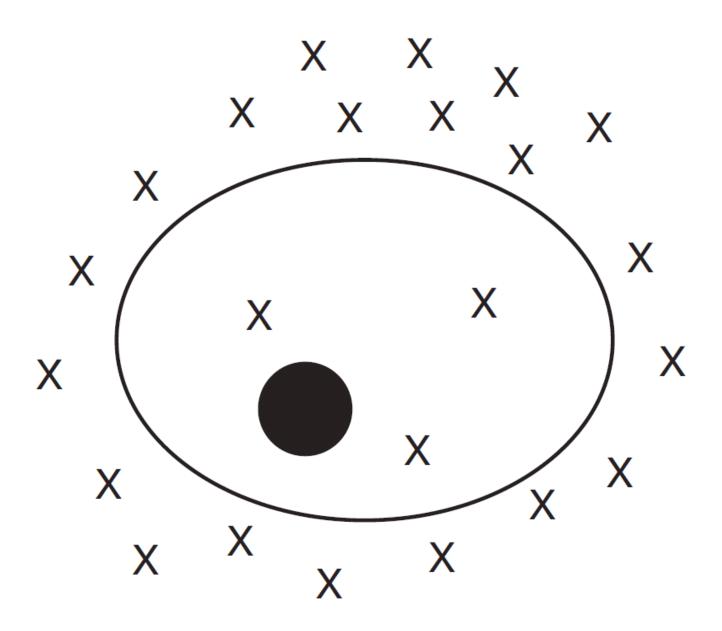
# D3 B4 C2 B4 C1 A1 D2 B4 D4 B4 A5 D3 of prokaryotic and eukaryotic cells A1 A2 A3 C4 D2 A4 A5 D2

GRID	1	2	3	4	5
A	Α	В	C	D	E
В	F	G	н	IJ	K
C	L	M	N	0	P
D	Q	R	5	Т	u
E	٧	W	X	Y	Z

3	2	5
Cell	Cytoplasm	Nucleus
Membrane		
6	1	4
DNA	Ribosome	Mitochondria

### Puzzle 4:

Move X out of the cell....



#### Puzzle 5:

# TINHK YUO CNA SVAE YURO FIREND? CALISSFY AS PORKAYRTOIC OR EKUAYRTOIC. PTTAREN RVEELAS CDOE.

A.	Prokaryotic	В.	Eukaryotic

Advanced 20 Membrane bound 40

Primitive 50 Unicellular 35

Not Membrane bound 40 Multicellular 50

#### Puzzle 6:

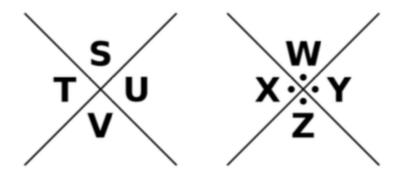
# NEWS ALERT Set to AT

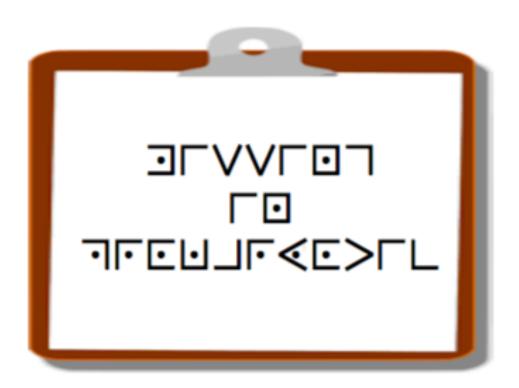
wyvrhyfvapj wyvkbjl nlulapjhssf pkluapjhs jlssz



#### Puzzle 7:

A	В	С	J.	ł
D	E	F	М٠	I
G	Н	ı	P	(





Puzzle 8:



## Get the zombie cure!! Use the phone to dial for help!

The	⊔	are the
"powerhouse." The	$\square_{}$	_ is where
proteins are made. The _		stores
nutrients, waste, and water.	All of these are	examples of
cell		