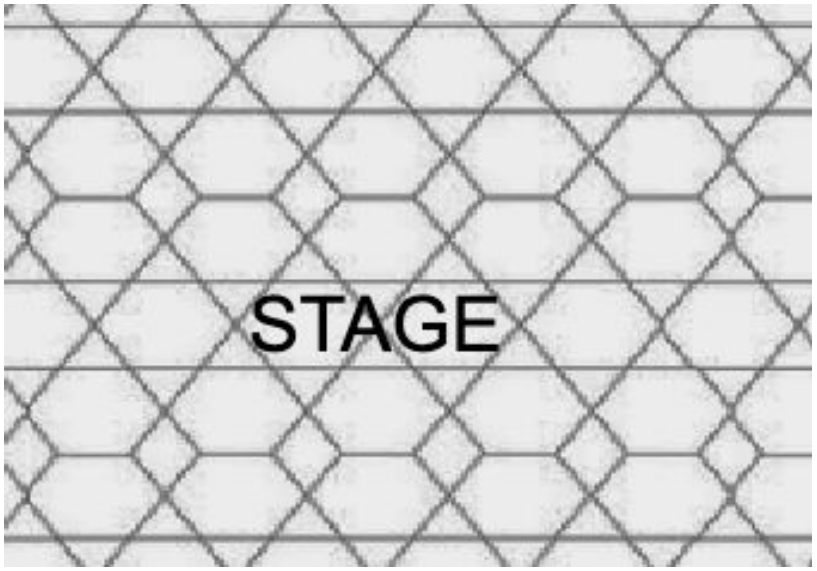
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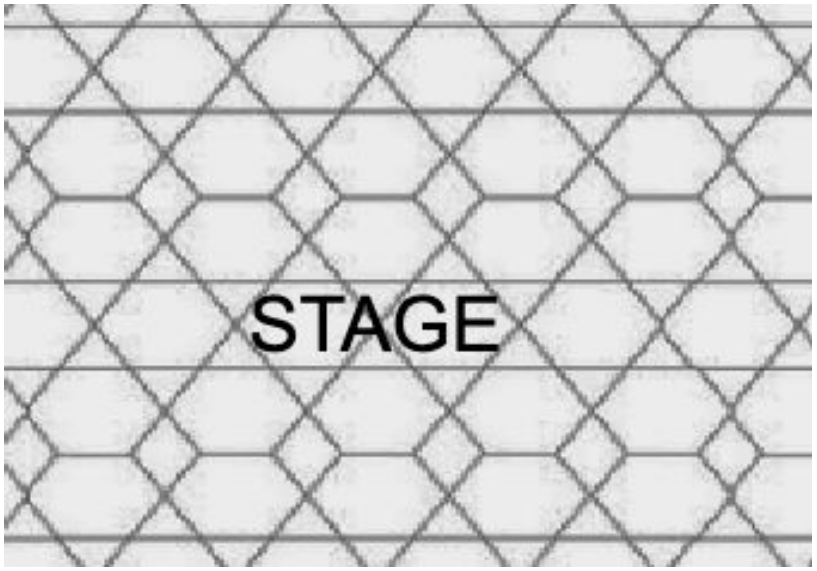
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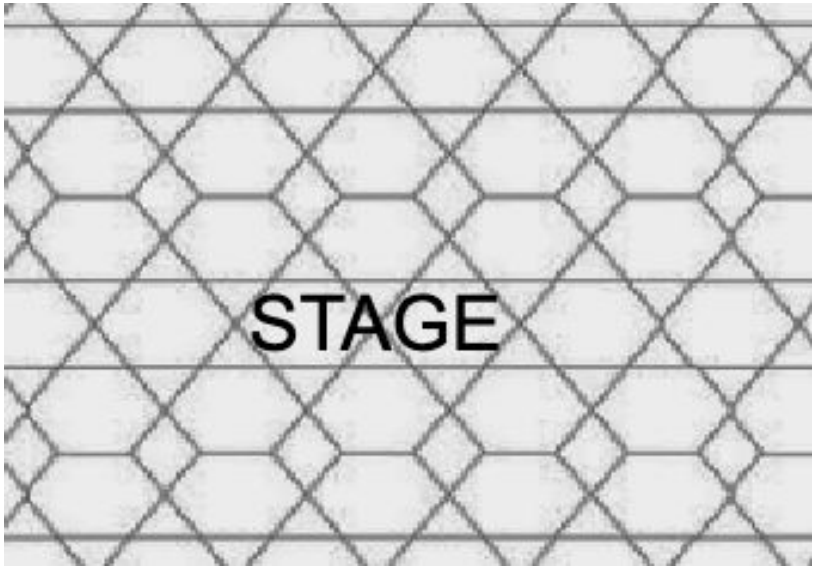
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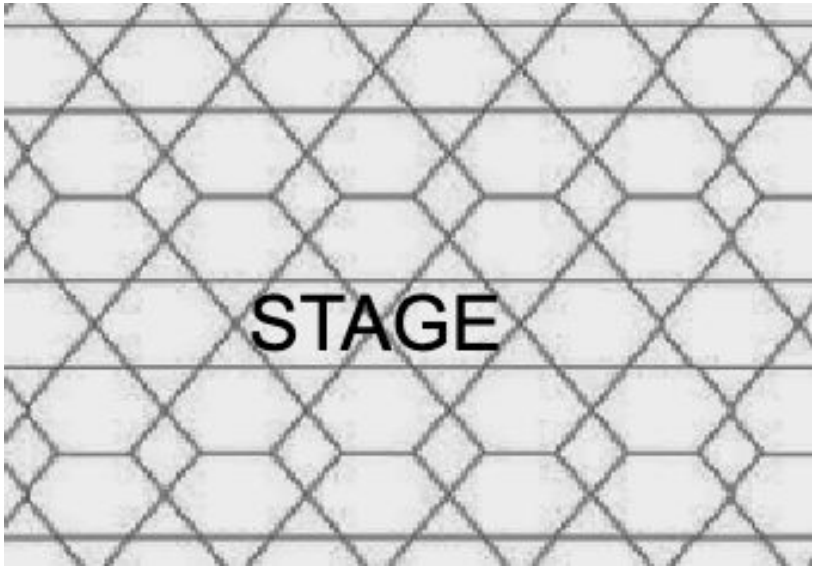
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Target the Receptor

A protein on the outer coat of a virus binds to a receptor protein on the surface of the cell the virus will infect. A receptor acts as a doorway into a cell!

Stage 1 / 5

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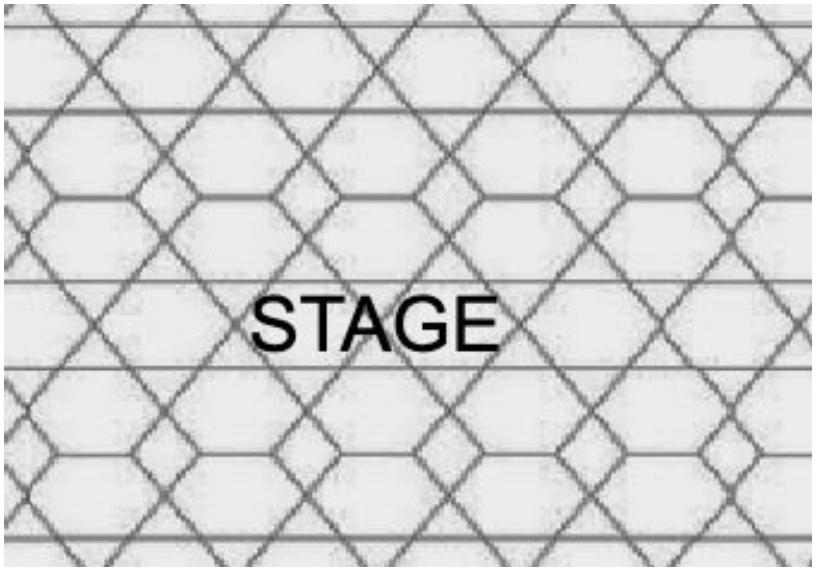
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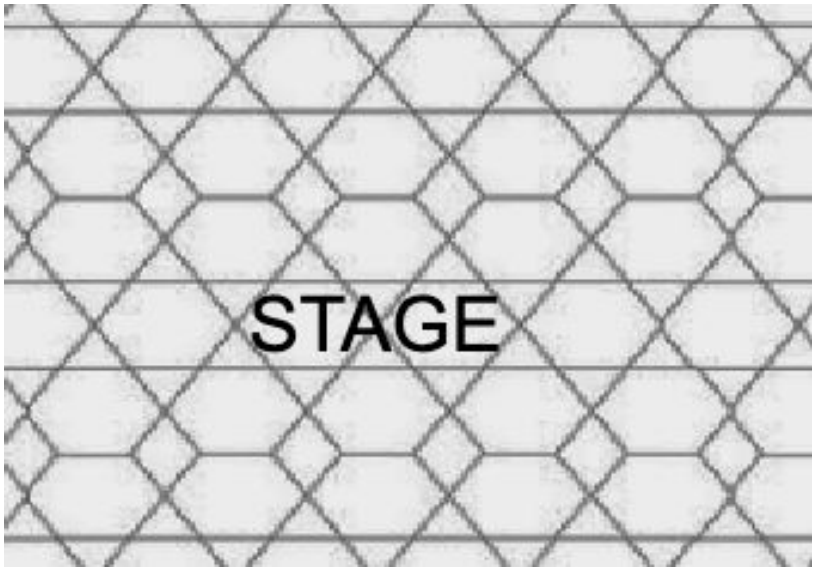
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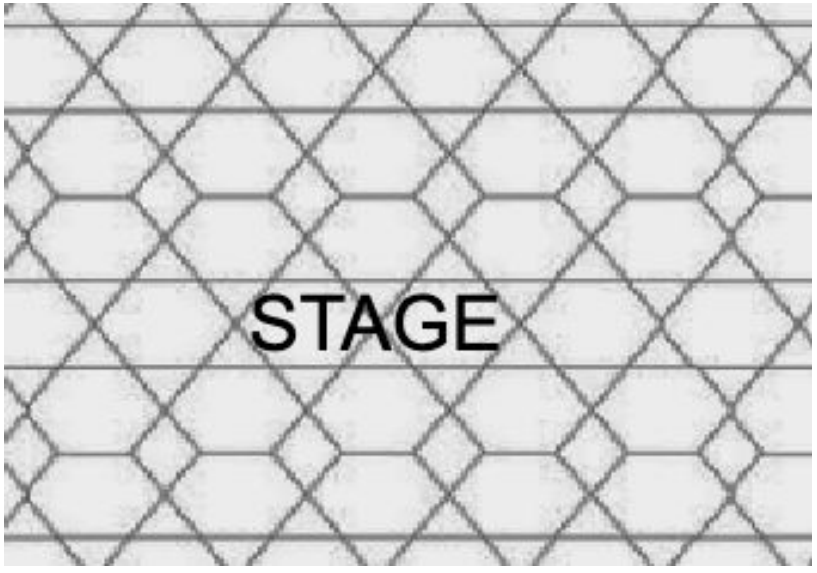
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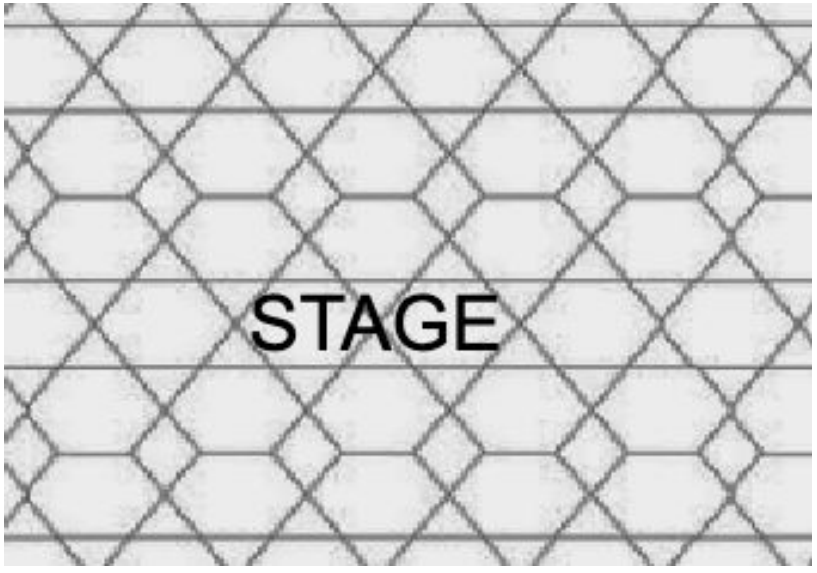
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Target the Receptor

A protein on the outer coat of a virus binds to a receptor protein on the surface of the cell the virus will infect. A receptor acts as a doorway into a cell!

Stage 1 / 5

Viral Entry

The virus enters, cutting or sneaking it’s way into the cell, and introduces viral genetic material.

Stage 2 / 5

Viral Entry

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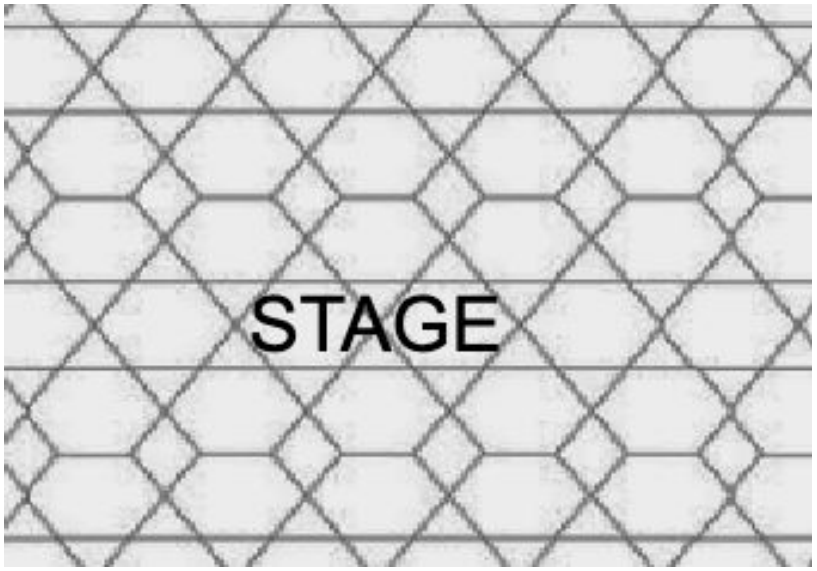
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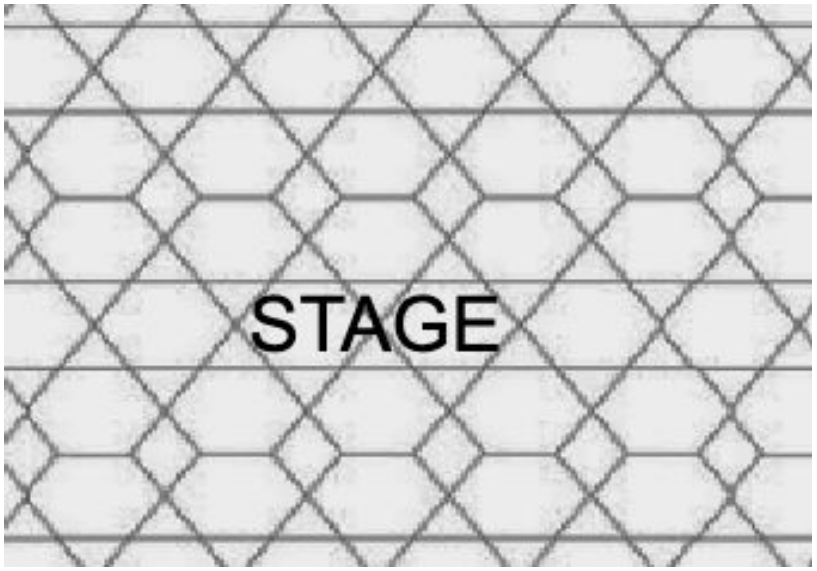
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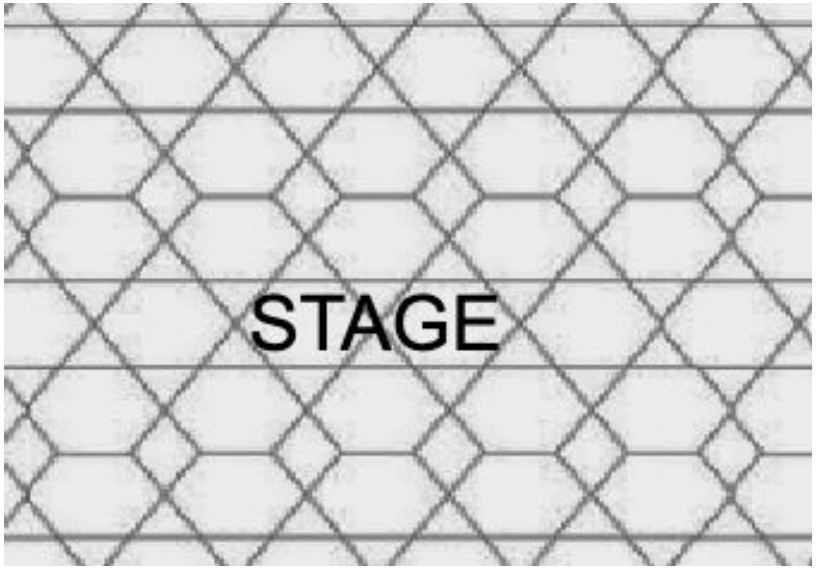
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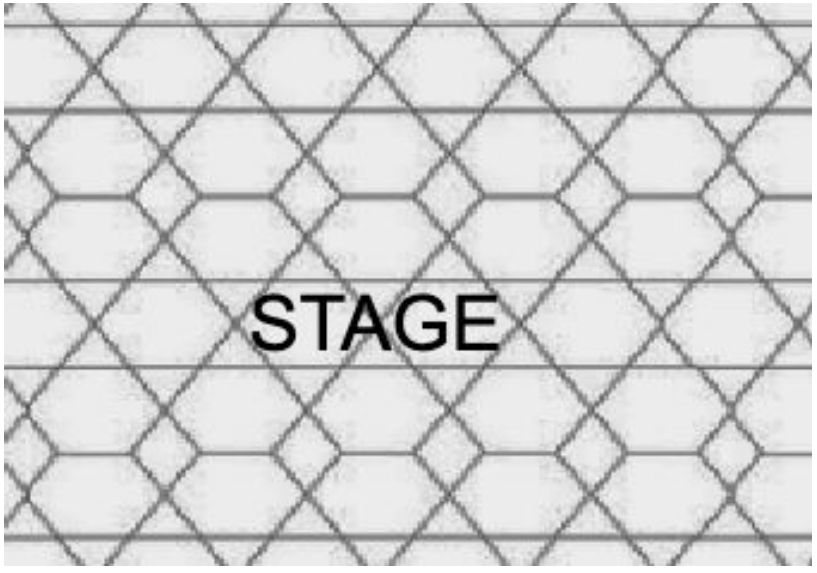
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Viral Entry

The virus enters, cutting or sneaking it’s way into the cell, and introduces viral genetic material.

Stage 2 / 5

Viral Entry

The virus enters, cutting or sneaking it’s way into the cell, and introduces viral genetic material.

Stage 2 / 5

Replication

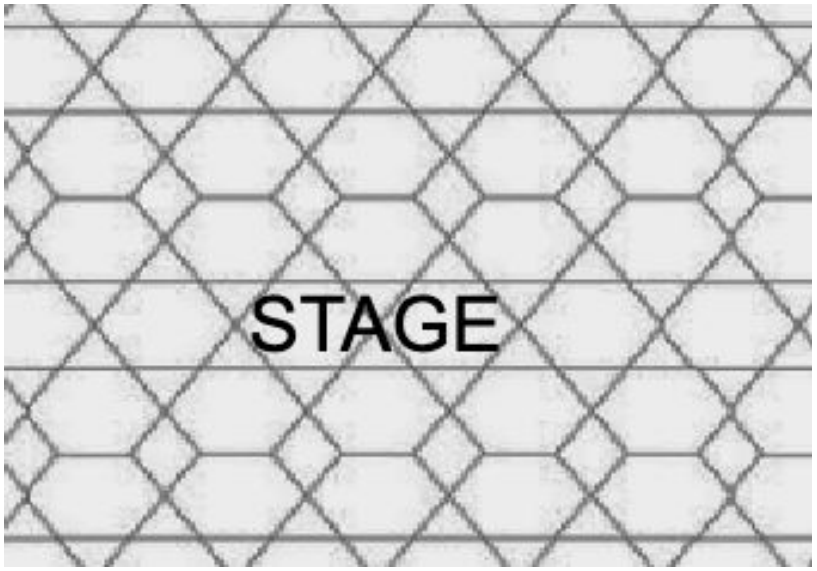
Genetic viral material is released within the cell and the cell translates it to become viral proteins.

Stage 3 / 5

Replication

Genetic viral material is released within the cell and the cell translates it to become viral proteins.

Stage 3 / 5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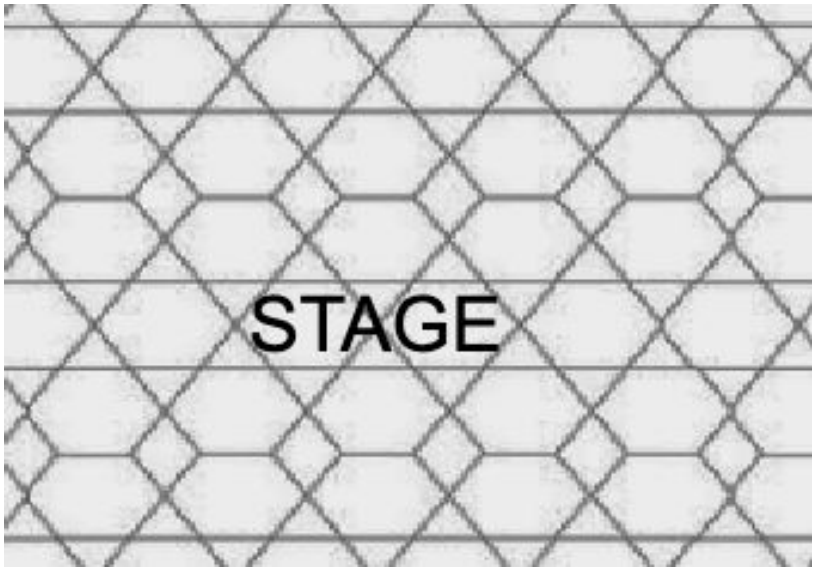
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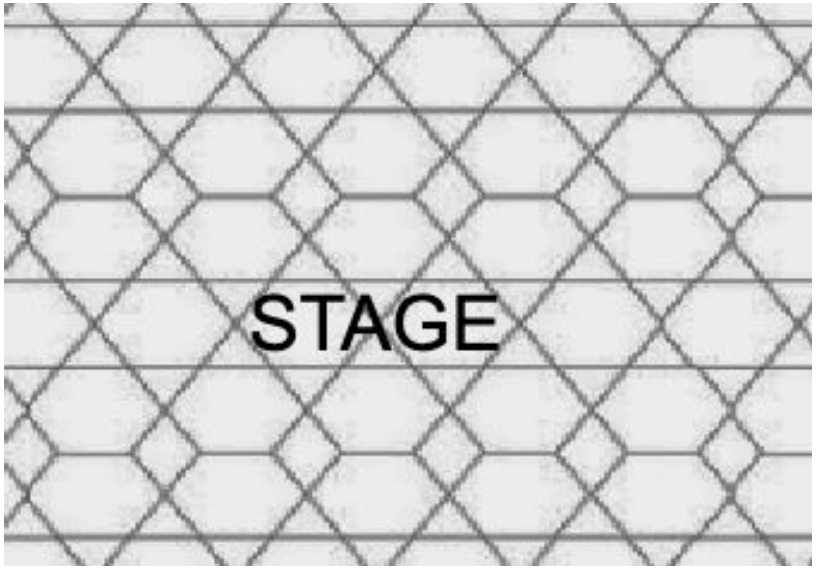
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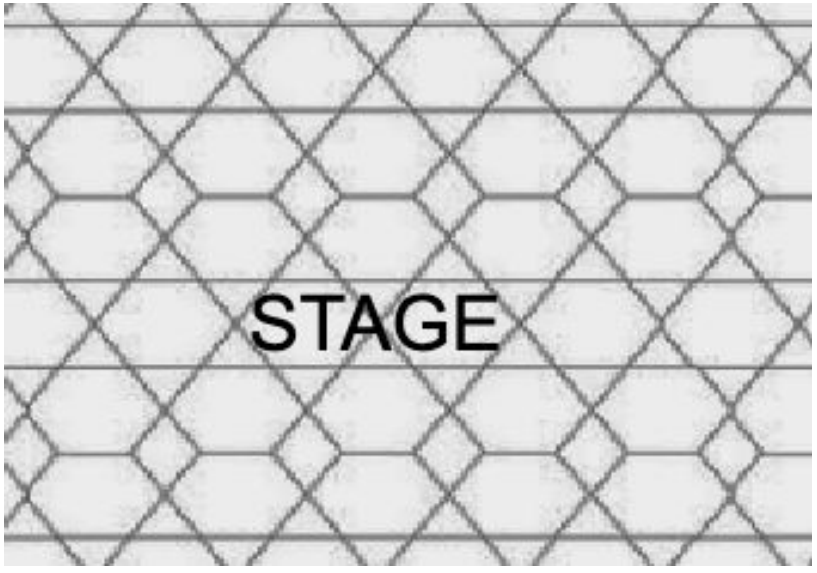
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Stage 3 / 5

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Stage 3 / 5

Replication

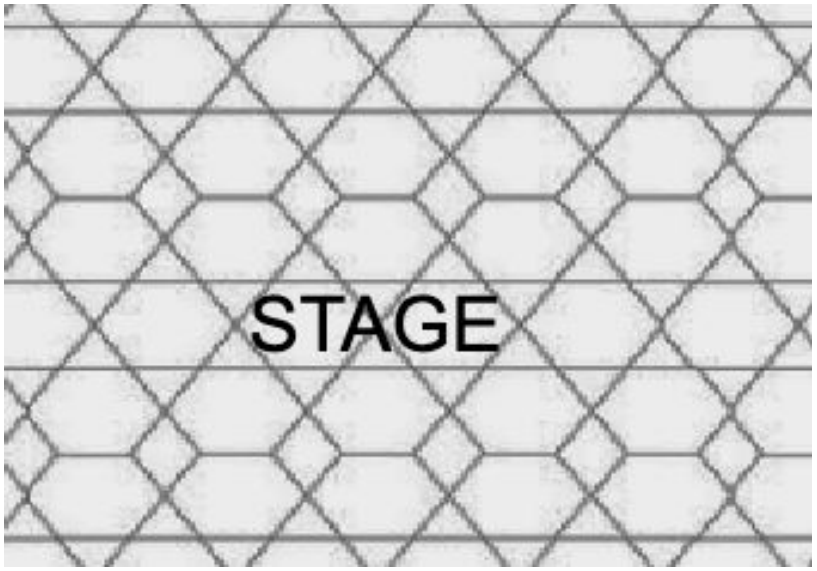
Genetic viral material is released within the cell and the cell translates it to become viral proteins.

Stage 3 / 5

Assembly

The viral proteins which the cell produced and copied viral genetic material are put together to make new viral particles.

Stage 4 / 5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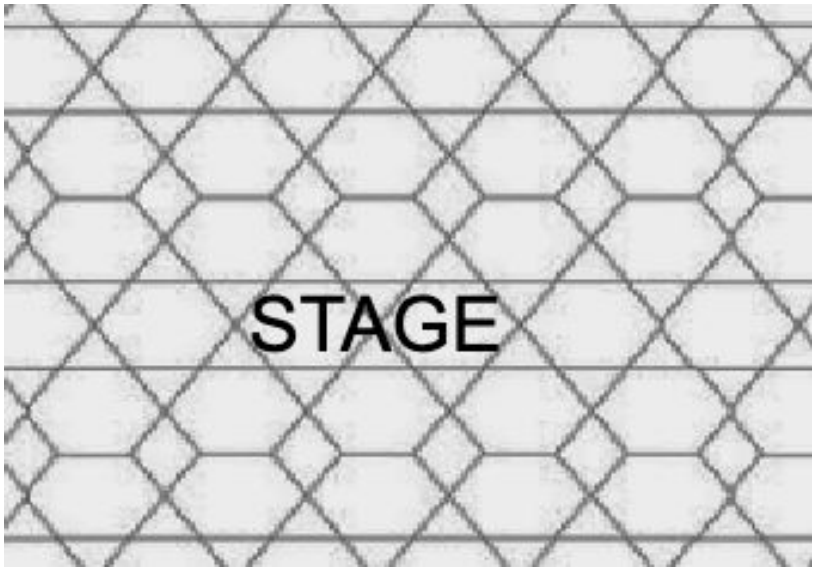
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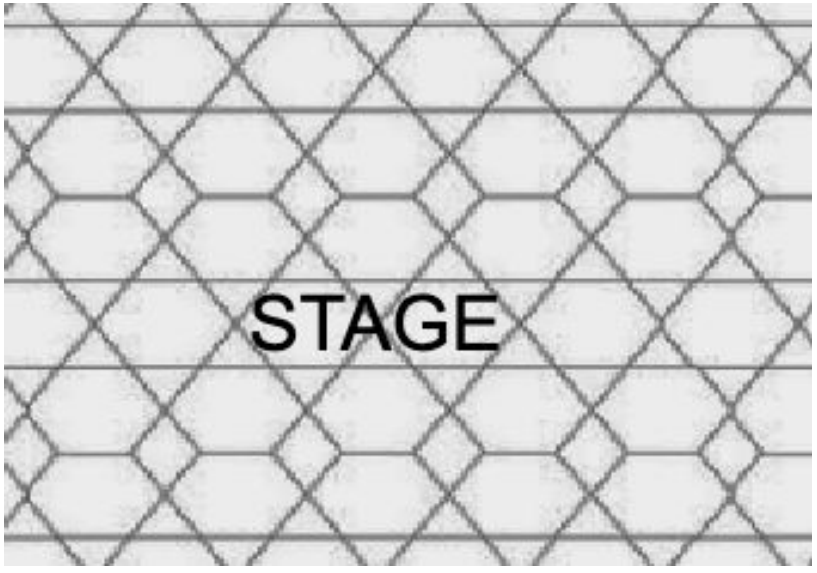
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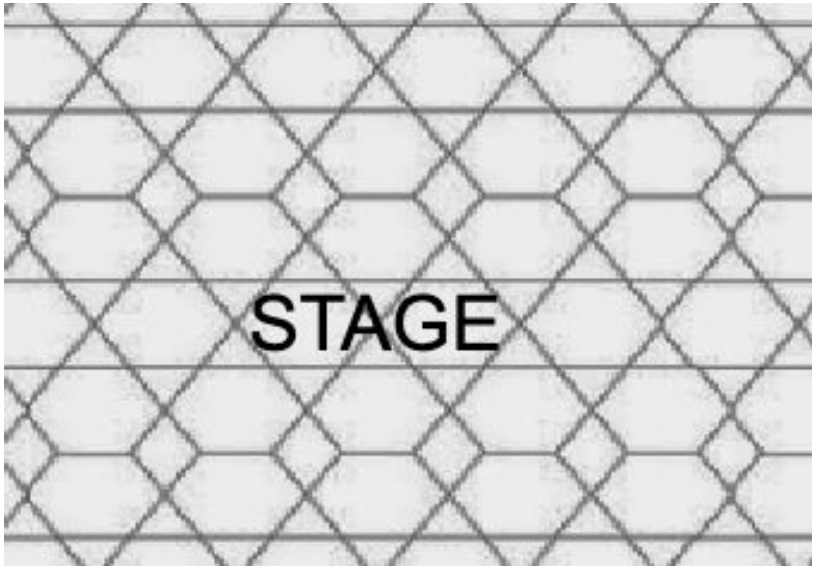
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Stage 4 / 5

FINAL STAGE

VIRAL BUDDING

The new viruses move to the cell surface to be released outside of the cell.
After the viruses are released they are ready to infect new cells!
Stage 5 / 5

YOU WIN!

VIRUS TYPE: Lyssavirus

Example: Rabies

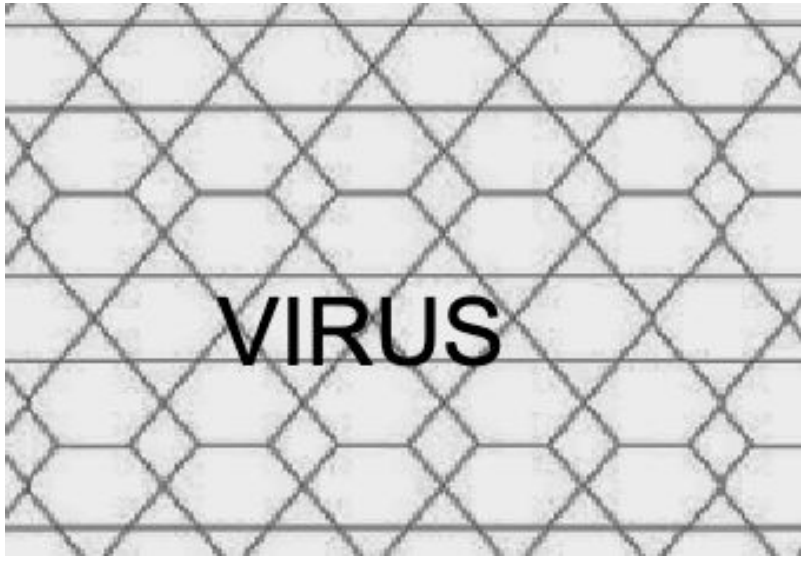
Treatments: Rabies Vaccine

Stage Costs

Target Receptor	30 ATP
Viral Entry	19 ATP
Replication	28 ATP
Assembly	39 ATP
Budding	8 ATP


VIRUS


VIRUS


VIRUS


VIRUS

VIRUS TYPE: Retrovirus

Example: HIV

Treatments: Anti-retrovirals

Stage Costs

Target Receptor	52 ATP
Viral Entry	10 ATP
Replication	16 ATP
Assembly	22 ATP
Budding	45 ATP

VIRUS TYPE: Influenza Virus

Example: The Flu

Treatments: TamiFlu

Stage Costs

Target Receptor	5 ATP
Viral Entry	10 ATP
Replication	15 ATP
Assembly	35 ATP
Budding	40 ATP

VIRUS TYPE: Flavivirus

Example: Zika

Treatments: Acetaminophen

Stage Costs

Target Receptor	15 ATP
Viral Entry	25 ATP
Replication	42 ATP
Assembly	28 ATP
Budding	28 ATP

VIRUS TYPE: Filovirus

Example: Ebola

Treatments: Hospital Intervention

Stage Costs

Target Receptor	42 ATP
Viral Entry	12 ATP
Replication	16 ATP
Assembly	34 ATP
Budding	28 ATP