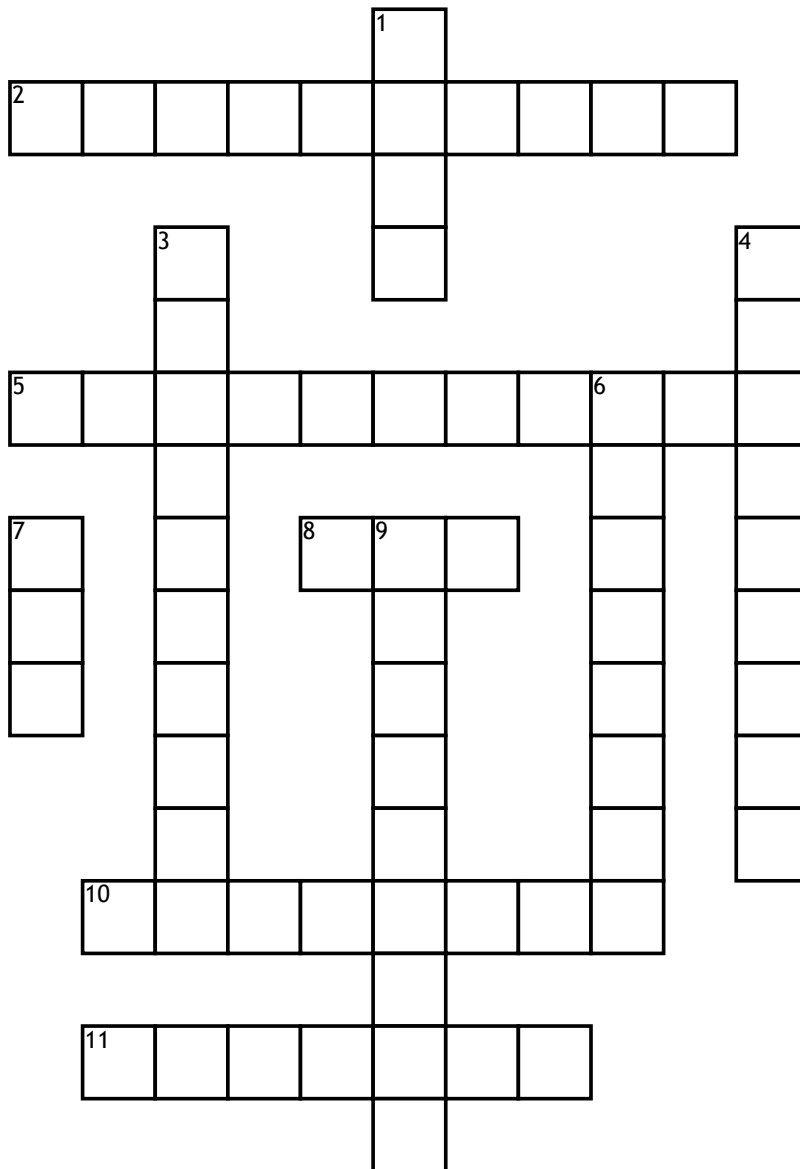


Name: _____

Date: _____

Cell life cycle



Across

2. Necrosis of tissue, following ischaemia
 5. Mitochondrial inner membranes are loosely bound to this, which is released during apoptosis in order to activate caspase enzymes
 8. Binding of a ligand to this will induce apoptosis
 10. Enzymes leak from lysosomes and digest cellular contents; local inflammatory response
 11. This binds to CDK4 and CDK6, causing them to phosphorylate retinoblastoma protein

Down

1. These proteins induce or inhibit apoptosis, and control apoptosis by regulating the permeability of mitochondrial outer membrane permeability
 3. G1, S and G2 are the phases of this
 4. This is the result of impaired vascular perfusion, resulting in loss of nutrients (mainly oxygen)
 6. These cannot be replaced to the extent that myocardial infarction occurs
 7. A deficiency in this protein can lead to cancer, following DNA damage
 9. Fragmented, membrane-bound bodies package cell contents