STUDENT NUMBER 38763443

BLG 1501 ASSIGNMENT 2 UNIQUE NUMBER 692944

QUESTION 9.1

9.1 organic compounds + oxygen → carbon dioxide + water + energy

6

1

9.6 ATP is needed to power glycolysis which turns glucose into pyruvate which undergoes several other processes (Krebs cycle, cellular respiration) which then produces more ATP as well as HO2 to continue the process and give energy to cells.

0

9.12

FERMENTATION	CELLULAR RESPIRATION
Anaerobic conditions	Aerobic conditions
Harvest less energy	Harvest more energy
Yields 2 ATPs	Yields 38 ATPs
Final electron acceptor is an organic molecule pyruvate	The final electron acceptor in oxygen

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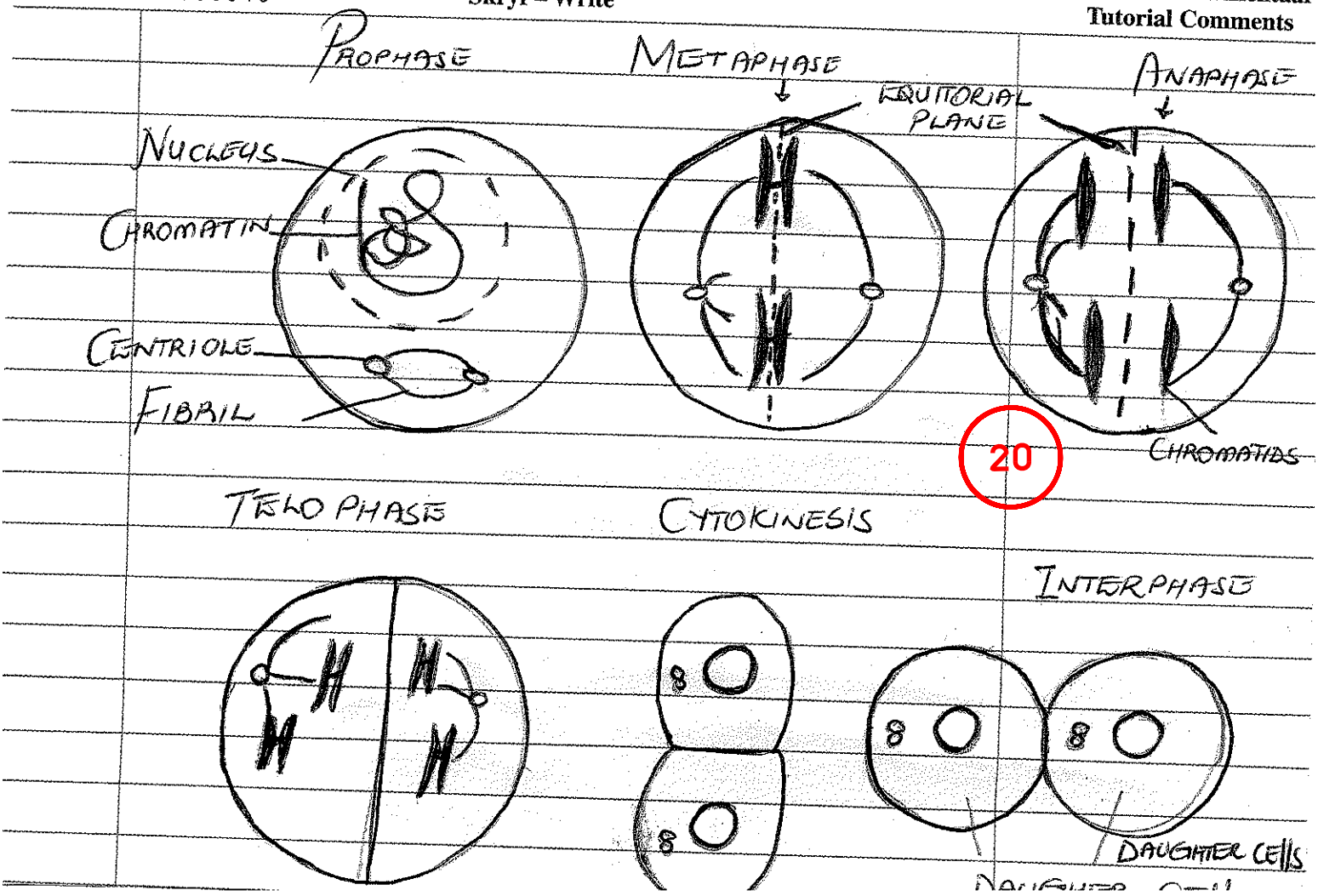
10.3

70059845

WERKOPDRAGSKRYFBLOK – ASSIGNMENT WRITING PAD
Skryf – Write

Dosent se Kommentaar
Tutorial Comments



20

14

11.6

Mitosis	Meiosis
DNA occurs during interphase before mitosis begins	DNA replication occurs during interphase before meiosis 1 begins
One division	Two divisions
Two daughter cells ,each 2N and genetically identical to parent cell	Four haploid cells, each containing half as many chromosomes as the parent cell
Effects growth and repair	Produces gamates
Synapsis does not occur	Synapsis occur during prophase

12.5

The purple flower must have the P-allele because purple is dominant. We do not know what the other alles is –P or p .Let suppose the other alles is P

PP crossed with pp(true bred white)
Gamates through meiosis: P crossed with p
F1 generation is all Pp, all purple

Other option where a the purple flower is a heterozygote

20

P-generation
Pp(Heterozygote crossed with pp(true bred white)
Gamates through meiosis P and p crossed with pp

	p	P
P	Pp	Pp
p	pp	pp

Phenotype: 2 purple to 2 white
If the outcome of our cross is 2 purple flowers to 2 white flowers, the purple flower was a heterozygote; the outcome is 50% white and 50% purple.

13.10

8

Ribosomes are made of two types of subunits i.e. large and small units .The ribosomal sub units are made in the nucleolus. The subunits are then transparent via the nuclear pores to the cytoplasm.Aproximately two thirds of the mass of the RNA. The Ribosomes of Eukaryotes are slightly larger than those of prokaryotes. Ribosomes play a role in formation of polypeptides.

14.8

6

predation: the interaction in which a predator eats another animals.

Herbivory: the interaction in which a herbivore eats plants.

Parasitism: A symbiotic relationship in which parasites benefits at the expense of the host

15.8

Greenhouse Effect

C02 ,water vapour ,sulphur dioxide and other greenhouse gases in the atmosphere intercept and absorb radiant energy emitted by the earth and reflect it back towards the earth ,this process caused some of the solar energy to be retained .The greenhouse effect is believed to have contributed to the present global warming .

6

16.3

Habitat loss; Human activities such as agriculture, urban development, forestry, mining etc can also lead to habitat loss.

Overharvesting: Overharvested organisms such as elephants, seabirds, whales, rhinoceroses and fish, are in danger of extinction of overharvesting.

10

Introduced species: Introduction of exotic species are those that humans move intentionally or accidentally from the species native locations to new geographic regions.

Global change is the final threat to biodiversity ,is global change which changes the fabric of the earth's ecosystem at regional to global scale .Global changes include climate ,atmospheric chemistry and broad ecological system that reduce the capacity of Earth to sustain life.

RESULTS

Total = 96 / 100 (96%)

COMMENTS

1	question not adequately addressed