



مؤسسة الإمارات للتعليم المدرسي
EMIRATES SCHOOLS ESTABLISHMENT



United Arab Emirates

Grade

6

امتحان نهاية الفصل الدراسي الثالث 2023/2022 – الجزء الورقي

End of Term 3 Exam 2022/2023- Paper Part

الصف هنا ←

	رقم الطالب / Student Number
	اسم الطالب / Student Name
	المدرسة / School
6	الصف / Class
General / العام	المسار / Stream
Science / العلوم	المادة / Subject
Inspire	

This table must be filled in accurately by the marking committee

يملأ هذا الجدول بدقة تامة من قبل لجنة التقدير

المراجع Reviewer's		المقدر 2 Marker's 2		المقدر 1 Marker's 1		رقم السؤال Question No.
الاسم Name	الدرجة Mark	الاسم Name	الدرجة Mark	الاسم Name	الدرجة Mark	
						Q.(1)
						Q.(2)
						Q.(3)
						Q.(4)
						مجموع P1 * يرصد في المنهل P1 Total is to be recorded on Al Manahal
						Q.(5)
						Q.(6)
						مجموع P2 * يرصد في المنهل P2 Total is to be recorded on Al Manahal

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Part 3

Question

1

The table below shows the number of offspring with white and purple flowers and yellow and green seeds that resulted of breeding two hybrid pea plants. What is the proportion of purple to white flowers and the yellow to green seeds in the generation?

Results of Hybrid Crosses			
Characteristic of Hybrid Parent	Trait and Number of Offspring	Trait and Number of Offspring	Trait Comparison
Flower Color (purple x purple)	 Purple 90	 White 30	$\frac{90}{30} = \frac{3}{1}$
Seed Color (yellow x yellow)	 Yellow 300	 Green 100	$\frac{300}{100} = \frac{3}{1}$

Question

2

The table below shows three different animals' behaviors. Classify each behavior as **innate** or **learned**.



Animal's behavior	Type
• Spider spinning webs to catch food	innate
• Birds flying	learned
• Tadpole swimming	innate



Question

3

The table below shows the possible phenotypes and genotypes for both the round and wrinkled seeds.

Phenotype and Genotype			
Phenotypes	 Round	 Wrinkled	
Genotypes	RR	Rr	rr

- Which genotype represented by the letters (RR)?

.....Homozygous dominant.....

- Which genotype represented by the letters (Rr) ?

.....heterozygous dominant.....

- Which genotype represented by the letters (rr)?

.....Homozygous recessive.....

Question

4

Write down how each seed travels from place to place using one of these ways:

(wind, water, animals)



water



wind



animals



*****BONUS*****

Question

5

A fatal disease is spreading through an aquarium containing both fish, which reproduce sexually, and sponges, which reproduce asexually. The disease has been identified in both species. Construct an explanation that states which species would be more likely to survive.

Fish, because fish reproduce sexually, two different parents and produce diverse offspring which helps them to survive.



*****BONUS*****

Question

6

Use the Punnett square below to complete a cross between a female fruit fly with straight wings (bb) and a male fruit fly with curly wings (BB).



 b
.....

 b
.....



Curly wings (BB)

 B

 B

	<u> B </u>	<u> B </u>
<u> b </u> <u> </u>	Bb	Bb
<u> b </u> <u> </u>	Bb	Bb

End of questions

