Name	Class	Date
Section 13-3 Cell	Transformation (pages	327–329)
This section tells what happen	es during cell transformation. It also if transformation has been successfu	o describes
Introduction (page 327)		
1. What occurs during tran	sformation?	
2. Is the following sentence DNA fragments.	e true or false? Griffith's extract o	of heat-killed bacteria contained
Transforming Bacteria	l (pages 327–328)	
· ·	to show the steps in transforming	g bacteria.
Foreign DNA is joined to a(a circular DNA molecule found	n), which is I naturally in some bacteria.	a small,
	•	
Recombinant plasmids are m	nixed with bacterial cells. Some bacte	rial cells take
in the recombinant DNA by	the process of	·
	*	
The culture is treated with a kills bacteria.	(an), a com	pound that
	V	
•	nsformed survive, because only they only they only they only tibiotic resistance.	carry a(an)
4. Give two reasons why aa	plasmid is useful for DNA trans	sfer.
b		
Transforming Plant C	011c (220 220)	
Transforming Plant C When researchers transf	effs (pages 328–329) orm plant cells using a bacterium	n that causes plant tumors how
do researchers prevent p	plant tumors from forming in the	e transformed cells?

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Naı	ame	Class	Date
6.	. Circle the letter of each senter	nce that is true about tra	nsforming plant cells.
	 a. Many plant cells can be tra a tumor-producing plasmi 		cterium that will, in nature, insert
	b. Sometimes plant cells in cu walls are removed.	ılture will take up DNA	on their own when their cell
	c. It is impossible to inject Di	NA directly into plant ce	lls.
	d. Plant cells that are transfor	rmed cannot develop int	o adult plants.
7.	. Describe what occurs in a suc	cessful transformation o	of cells
-	· · · · · · · · · · · · · · · · · · ·		
	ansforming Animal Cells		
8.	. Describe how animal cells car	n be transformed by dire	ctly injecting DNA.
0	Is the following contours two	on false? The DNIA med	and a read for transformation of
	animal cells do not require m		ecules used for transformation of
10	. How is a DNA molecule cons		
10.	. How is a DIVA indiectile cons	tructed so that it will en	minate a particular gene:
11.	. Is the following sentence true	or false? Gene replacem	ent has made it possible to

Reading Skill Practice

When you read about related concepts, a compare-and-contrast table can help you focus on their similarities and differences. Construct a table to compare and contrast transformation in bacteria, plants, and animals. Look in Appendix A for more information about compare-and-contrast tables. Do your work on a separate sheet of paper.

identify the specific functions of genes in many organisms. _