Name	Date

Cellular Energy Section 2 Photosynthesis

transport

Main Idea⊃	(Details
	Scan Section 2 of the chapter. Write two questions that come to mind from reading the headings and the illustration captions.
	1
Review Vocabulary	
carbohydrate New	
Vocabulary	Use your book or dictionary to define each vocabulary term.
thylakoid	
granum	
stroma	
pigments	
NADP ⁺	
Calvin cycle	
rubisco	

Section 2 Photosynthesis (continued)

(Main Idea)

⊘Details—

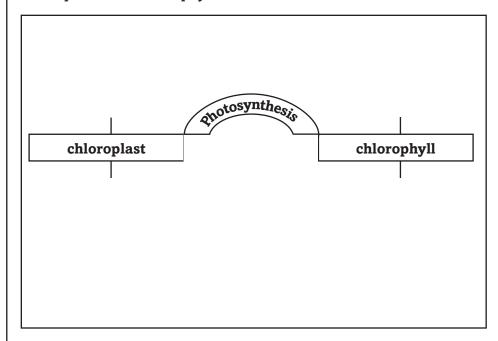
Overview of Photosynthesis

Summarize the functions of the light-dependent and light-independent reactions by completing the sentences.

Plants and other green	n organisms absorb	from
	The light-dependen	t reactions change
	_ into the molecules _	and The
light-independent reacti	ons use and	to make
	_•	
The light-independent	t reactions produce _	
which are then made int	to complex carbohydr	ates such as
	_, which stores	in plants.

Phase One: Light Reactions

Create a concept web to summarize what you know about chloroplasts and chlorophyll.



Analyze how leaves change color in the fall.		

Section 2 Photosynthesis (continued)

←Main Idea

Details

Phase Two: The Calvin Cycle

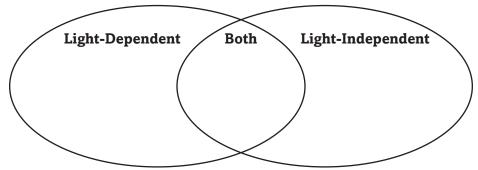
Model light-dependent reactions in a flow chart.

_

Compare light-dependent and light-independent reactions by putting each phrase into the correct part of the Venn diagram.

- forms stored energy
- makes NADPH
- makes sugar
- needs sunlight

- occurs in the chloroplast
- occurs in the dark
- uses Calvin cycle
- uses electron transport chain



Alternative Pathways

Compare two alternative photosynthesis pathways. Identify plants that use each pathway.

Pathway:	Pathway:
Description:	Description:
Plants that use this pathway:	Plants that use this pathway:

reactions.

 $\label{problem} \textbf{Explain the results of light-dependent and light-independent}$

:=
~
Œ
"
_
=
~
=
C
_
=
$\overline{}$
_
- 2
-2
-
π
1
10
Ċ
_
~
\leq
a
*
2
ш.
=
C
-
-
- C
.=
"
U
.=
-
-
σ
π
π
π
π=
π =
π Ξ
π ΕΕ
K-Hill
W-Hill
w-Hill
w-Hill a
raw-Hill a
Graw-Hill a
Graw-Hill a
CGraw-Hill a
AcGraw-Hill a
McGraw-Hill a
/McGraw-Hill a
/McGraw-Hill a
- McGraw-Hill a
A /McGraw-Hill a
oe/McGraw-Hill a
COP/McGraw-Hill a
oo /McGraw-Hill a
ncoe/McGraw-Hill a
ancoe/McGraw-Hill a
lencoe/McGraw-Hill a
Jencoe/McGraw-Hill a
Glencoe/McGraw-Hill a
Glencoe/McGraw-Hill a
Glencoe/McGraw-Hill a
© Glencoe/McGraw-Hill a
@ Glencoe/McGraw-Hill a
t @ Glencoe/McGraw-Hill a
t @ Glencoe/McGraw-Hill a
ht @ Glencoe/McGraw-Hill a
aht @ Glencoe/McGraw-Hill a
ight @ Glencoe/McGraw-Hill a
right @ Glencoe/McGraw-Hill a
vright @ Glencoe/McGraw-Hill a
wright @ Glencoe/McGraw-Hill a
nvright @ Glencoe/McGraw-Hill a
onvright @ Glencoe/McGraw-Hill a
Convright @ Glencoe/McGraw-Hill a
Convright @ Glencoe/McGraw-Hill a
Convright @ Glencoe/McGraw-Hill a division of The McGraw-Hill Companie
Convright @ Glencoe/McGraw-Hill a
Convright @ Glencoe/McGraw-Hill a