Name:\_\_\_\_\_ Hour:\_\_\_\_\_ Date:\_\_\_\_\_

## The Study of Light Chapter 24.1

## **Electromagnetic Radiation**

	_ is of _ called			n
Electromagnetic	in(	cludes		
• X				
•	light			
•	light			
<ul> <li>infrared</li> </ul>				
<ul> <li>Radio waves.</li> </ul>				
	c			
	, regardless of			
	of	when in	a	·
• Like				
	are like the	of	the	
Light	are like the is know	wn as a		, which is t
Light ● This	are like the is know from	wn as a wave	·	, which is t _ to the next.
Light • This • Most	are like the is know from are	wn as a wave	·	, which is t _ to the next.
Light • This • Most us to	are like the is know is know from are	wn as a wave wave e too	or	, which is tl _ to the next. f
Light • This • Most us to	are like the is know from are	wn as a wave wave e too	or	, which is tl _ to the next. f
Light • This • Most us to lengths.	are like the is know is know from are  <b>light</b> has a	wn as a wave wave e too	or	, which is tl _ to the next. f
Light • This • Most us to lengths.	are like the is know is know from are	wn as a wave wave e too	or	, which is th _ to the next. fo
Light • This • Most us to lengths.	are like the is know is know from are  <b>light</b> has a	wn as a wave wave e too	or	, which is tl _ to the next. f
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Light • This • Most us to lengths. • Sometimes	are like the is know from are    separate  acts like	wn as a wave wave e too	of light by <b>of</b>	, which is tl _ to the next. f
Light • This • Most us to lengths. • Sometimes	are like theis know fromare    separate separate acts like	wn as a wave e too	or of light by <b>of</b>	, which is th _ to the next. fo
Light • This • Most us to lengths. • Sometimes Each	are like the is know from are    separate  acts like	wn as a wave e too	or of light by <b>of</b>  nount of	, which is th _ to the next. fo

## <u>Spectroscopy</u>

	that	on	•
The	of	that com	
	acts as the star's		
We can learn th	e following from a star's finge	r prints.	
Tempera			
<ul> <li>Density</li> </ul>			
) When you burn	elements they give off	·	
-			
) What color is co	opper when it burns?		
)A rainbow is a _			
) Each element ei	mits and	light of the s	ame color.
) What percentag	ze of hydrogen does our sun h	ave?	
) What percentag	ge of hydrogen does our sun h	ave?	
) What percentag	ge of hydrogen does our sun h	ave?	
· · · ·	ge of hydrogen does our sun h	ave?	
oppler Effect			
<b>oppler Effect</b> Like	ge of hydrogen does our sun h , sound also car	in	
<b>oppler Effect</b> Like	, sound also car	in	
Doppler Effect Like When a	, sound also car	in	a high
Doppler Effect Like When a When the	, sound also car  car is pitch.	in , it away, it has a	a high
Doppler Effect           Like           When a           When the           The	, sound also car car is pitch. is not	in , it away, it has a different. You onl	a high a Y
Doppler Effect Like When a When the The	, sound also car car is pitch. is not it to be	in , it away, it has a different. You onl because the	a high a y
Doppler Effect           Like           When a           When the           The	, sound also carcar is pitch. is not it to be	in , it away, it has a different. You onl because the is	a high a y e
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Doppler Effect           Like           When a           When the           The           The           The           The           The	, sound also car car is pitch. it to be it to be of of a wave tha of a wave tha of a wave tha fa	in , it away, it has a different. You onl because the ischa cha  	a high a y e nge in from a to

2.) If a star is moving away from us, the light is what color?