

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	<p>2SWL8QV FRUUHFW</p>	<p>0LFH DQG %HHWOHV DUH WKH SU EHFDXVH WKH\ HDW\ FRQVXPHUV FRQVXPHUV HDW SULPDU\ FRQVXPHUV 7 EDWV RZOV UDFRFRQV DQG GUDJRQIO SULPDU\ FRQVXPHUV</p>
	<p>2SWL8QV LQFRUUHF</p>	<p>2WKHU WKDQ PLFH DQG EHHWOH RUJDQLVW WKH IRRG ZHE %XW JUDVVHV HDW SULPDU\ FRQVXPHUV</p>
	<p>2SWL8QV LQFRUUHF</p>	<p>7KHUH DUH VHYP RUJDQLVW D WKH IRRG ZHE EXW WKLV LV QRW WKH G RUJDQLVPV</p>

STAAR Spring 2024 Grade 8 Science Rationales

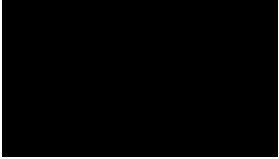
Item Position	Rationale
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2 S W L R Q %  
F R U U H F W

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
2SWLRQ \$ FRUUHFW	\$FFRUGLQJ WR 1HZWRQTV WKLUC REMHFW H[HUWV D IRUFH RQ D VHFRQG VHFRQG REMHFW ZLOO H[HUW DQ HTXDO IRUFH RQ WKH ILUVW REMHFW
2SWLRQ % LQFRUUHF	7KH DPRXQW RI IRUFH WKH IORR W@SWLRQ&WR QRW JUHDWHU WKDQ WKH IRUFH WKH EDOO H[HUWV RQ WK
2SWLRQ & LQFRUUHF	7KHJURPIORRUSXKQJXSRRQWKH EDOO WIUDYWWSSXQQQJGGRQRQWKHEDDOGB

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	2 SWL% QV FRUUHFW	% UHDNLQJ DQ HJJ GRHV QRW FK FKHPLSDG SHUWLHV RIKW KHHIHLJWH LV D SK\VLFD O F KDQJH
		



STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	SWV	3URWRQ FKDUJH DQG ORFDWLRQ 1HXWURQ FKDUJH DQG ORFDWLRQ (OHFWURQ FKDUJH DQG ORFDWLRQ
	SW	7KH VWXGHQW DQVZHUV KDOI RI V FRUUHFWO\
	SW	7KH UHVSRRQH LV LQERUHEDVRL

1XFC

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
2SWLRQ % FRUUHFW	:KHQ YLHZHG IURP (DUWK WKH EH D ZDQLQJ FUHVHQW PRRQ ZKHQ LW 3RVLWLRLY LV EHFDXVH WKH GDUN SRU WKH PRRQ LV JHWV DQJRODUJHU W DPRXQW RI OLJKW FDQ EHWWHG HRRI WKH WKH PRRQ
2SWLRQ \$ LQFRUUHF	:KHQ LW BRVLQVLRQK:H PRRQ DSS WEHD ZDQLQJ FUHVHQW LV LV EHFDXVH IURP (DUWKIV SHWKSHPFRVHWO\ GDUN ZLWK D VPDOO DPRXQW RI OLJKW VLGDIQWKDWJKW SRUWHVWLQJ ODUJHU HDFK GD\
2SWLRQ & LQFRUUHF WKG	:KHQ LW BRVLQVLRQK:H PRRQ DSSH WEH DZQLQJ JLEERXVKLVRQV EHFDXVH IURP (DUWKIV SHWKSHPFRVHWO\ OLW RSEBWBIB @UMBD FBY, HUH S" A y (lpky (W PL B)D GHFUHDVLQ
2SWLRQ & L	

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
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STAAR Spring 2024 Grade 8 Science Rationales

Item	Rationale
[REDACTED]	2 S W L' R Q V F R U U H F W

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
2SWLRQ & FRUUHFW	2UJDQLVPV LQ .LQJGRP \$QLPDOL PXOWLFHDOXOWHURWURSKLFD DQG KDYH QXFOHXV	
2SWLRQ \$ LQFRUUHF	2UJDQLVPV LQ .LQJGRP %DFWHDU QXFOHXV	
2SWLRQ % LQFRUUHF	)XQJL DUHDXQVWURSKLF	
2SWLRQ ' L LQFRUUHF	2UJDQLVPV LQ .LQJGRP \$UFKDH PXOWLFHOOXODU	

# STAAR Spring 2024 Grade 8 Science Rationales

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	2 SWLRQ \$ FRUUHFW	3 ODQWV FRQYHUW OLJKW HQUJ IRU SODQW JURZWK
	2 SWLRQ % LQFRUUHF	3 ODQWV FRQYHUW WKHUPDO HQUJ\
	2 SWLRQ & LQFRUUHF	3 ODQWV FRQYHUW WKHUPDO PHFKDQLFDO HQUJ\
	2 SWLRQ ' L LQFRUUHF	3 ODQWV FRQYHUW OLJKW HQUJ HOHFWULFDO HQUJ\







STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
2 SWL 8 QV	(OHPHQZWK WKH VDPH QXPEHU I FRUUHFW HOHFWDUREQ/ WKH VDPH DUREQ SYH D

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
2SWLRQ % FRUUHFW	6LPLODU IRVVLOV RQDYUJHUIRXXGPRC FRQWLQHQWVVKRZV WKDW WKH FRQWLQ ZHUH PRVW OLNHO\ MRLQHG RYHU PL DJRQGG VORZO\ PRYHG DSDUW
2SWLRQ \$ LQFRUUHF	)RVVLOV LQ XQG RQ WKH VDPH FR QRW KHOS H[SODLQ WKH PRYHPHQW RI F FRQWLQHQWVWKHSDWVHGLIIHUHQFH EHWZHHQ WKH IRVVLOV LV QRW
2SWLRQ & LQFRUUHF	)RVVLOV LQ XQG RQ WKH VDPH FR QRW KHOS H[SODLQ WKH PRYHPHQW RI F FRQWLQHQWVWKHSDWVWKHIRVVLOV ZHUH LQ VDPH WLPH SHULRG GRHV QRW DFFRXQW PRYHPHQWXPXOWLSOH SODWHV
2SWLRQ ' LQFRUUHF	)RVVLOV LQ WKH JLRQWDOHQV XQLTXH

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	SWV	)URP WRS WR ERWWRP &RPHW 0HWHRU RU 0HWHRU 1HEXOD
	SW	7KH VWXGHQW DQVZHUV KDOI RI V FRUUHFWO\
	SW	7KH UHVSQRQVH LV LQFRUUHFW RU



STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	2SWLRQ ' L FRUUHFW	%HFDXVH WOHVH ZDWCUPRUH VD EHLQJ DGGHG WR WKH VRLO WKH QDWLY SRSXODWLRQ ZLOO OLNHO\ GHFU
	2SWLRQ \$ LQFRUUHF	0RVW QDWLYH FRQVXPHUV GR Q WUHHMRWKH QXPEHU RI FRQVXPHUV ZLOO LQFUHDVH
	2SWLRQ % LQFRUUHF	6DOW FHGDU WUHHV XVH PRUH Z WSHFLWKHUHMRKH ZDWHU OHYHOV LQ WK ZLOO GHFUHDVH
	2SWLRQ & LQFRUUHF	6DOW FHGDU WUHHV DGG WDKAD C OHYHOV ZLOO LQFUHDVH

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
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STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
2SWL7QV FRUUHF		\$ QHZ PRRQ RFFXUV DSSUR[LPDV GD\V GD\V GLYLGHG E\ WKH QXPEHU RI LW WDNHV EHWZHHQ IXOO PRRQV GD\ WKDW QHZ PRRQV FDQ RFFXU GXULC GD\ SHUZRIBUHIRUH WKHUH DUH DERXW PRRQV WKDW FDQ RFFXU LQ C
2SWL8QV LQFRUUHF		(LJKW LV WKH QXPEHU W QXPEHUQRIZ PRRQV LQ D \HDU
2SWL8QV LQFRUUHF	WHDFQ	7ZHQLQH LV WKH QXPEHU QHZ PRRQ QRW WKH QXPEHU RI QHZ SHU \HDU
2SWL9QV LQFRUUHF	WPRQWK	7KLURQH LVJWKH QXPEHU RI GD\ QRW WKH QXPEHU RI QHZ PRRQV \HDU





STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
	2SWLRQ %   3URWRQV DQG QHXWURWURQV FRUUHFW   WKH DWRPLF PDVV 2SWLRQ \$ LQFRUUHF'

QPIF VOW/bgd&...V b'€





STAAR Spring 2024 Grade 8 Science Rationales

Item  
Position

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	SWV	7KH VWXGHQW LGM <del>QFRDGH</del> LIWKH FKDUDFWHULVWLFV IURP WKH WRS DV WZ SULQFLSOHV RI FHOO WKHRU\
	SW	7KH VWXGHQW DQVZHUV KDOI RI V FRUUHFWO\
	SW	7KH UHVSQRQVH LV LQFRUUHFW RU

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	2SWLRQ % FRUUHFW	2FHDQLF ULGFRQWDO ULI RFFXU DW GLYHUJHQW SODWH ERXQGDULH 7UHQFKHV DQG YROFDQRHV RFFXU DW FRQYHUJHQW SODWH ERXQGDULH
	2SWLRQ \$ LQFRUUHF	&RQWLQHQWDO ULIW YDOOHV D SODWH ERXQGDULHV QRW FRQYHUJHQW SOD ERXQGDULHV
	2SWLRQ & LQFRUUHF	2FHDQLF ULGJHV GR QRW RFFXU SODWH ERXQGDULHV
	2SWLRQ ' L	7UHQFKHV GR QRW RFFXU DW GL LQFRUUHF ERXQGDULHV

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
2 SWLS QV FRUUHFW	0 H&M D&F E'i' Q MF NHO DUH PDOOHDE PHWDOO VREBODIV 0 WLR Vqva' &bl ñ&€ À





STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
2SWL8QV FRUUHFW		7KH QXPEHU RI K\GURJHQ DWRPV UHDFWDQWV LV HTXDO WKRGWRJHQ QXPEHU DWRPV LQ WKH SURGXFWV 7KLV SURYLG WKDW WKH WRWDO PDVV LV FRQ
2SWL8QV LQFRUUHF		:KLOH WZR QHZ VXEVDQFHWKZM MGRHV QRW JLYH DQ\ LQIRUPDWLRQ DERX RI W\HRGXFWV DQG URDFWV DLP FDQ EH PDGH DERXW WKH FRQVHUYD
2SWL8QV LQFRUUHFW		:KLOH WKDWHEMQAW °\$•LV

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale
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SWV

7KH GLDJUDP VKRZV WKDW WKH 1  
 6RXWKHUQ +HPLVSKHUHV H[SHULHQFH GL  
 VHDVRQV DW WKH \$/DP HWUFDVRQ IRU  
 WKH GLIIHUHQFHV LQ VHDVRQV EHWZHHQ  
 !DLr H0H2` Ç Q W !DL(GL@p |D !DLp0WD

0 S °GLA H

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
2 SWLRQ & FRUUHFW	7KHJUDVVKR	B B M V H F R P S H W L Q J Z L K H U E L Y R Z R R G V D Q S D O O L Q J H G J U D V V K R S S R U E U L W W O H E X V K , W L V D O V F R P S H W L Q J F Z U W K Y R G H R Z O R U P ` "-)' U V 3 f J U D V V K R S S H U
2 SWLRQ \$	7KHJUDVVKR	B B M V H L V Q R W F R P S I L Q F R U Z X T E I S U R G X F H U V I R U R U F H

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Item Position	Rationale
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2 SWLSQV /RFDWLRQ P XFK KLJKHU WKDQRR  
 FRUUHFW WKH FDUW KDV PRUH JUDYLWDWLRQDO S  
 HQHUJ\ DW /RFDWLRQ

STAAR Spring 2024 Grade 8 Science Rationales

Item Position	Rationale	
	2SWL&QV FRUUHFW	0DJQHVLXP K&VRWRQV
	2SWL\$QV LQFRUUHF	&DUERQ KDV SURWRQV
	2SWL%QV LQFRUUHF	&KURPLKDV SURWRQV
	2SWL'RQV LQFRUUHF	=LQF KD\$URWRQV