

GLVWULEXWLRQ RI FKHPLFDO YDULDEOHV LQ WKH VHD 7KLV FRXUVH FR  
IRFXVHV RQ RFHDQRJUDSKLF DSSOLFDWLRQV WKDW ZLOO DVVLVW VWXO  
PDMRU DQG PLQRU FRQVWLWXHQWV RI VHD ZDWHU FRQWUROV RQ WKH  
IOX[HV DQG GLDJHQHVLV JDV H[FKDQJH DQG WKH F\FOLQJ RI GLVVROY  
LQIOXHGFH RI WKH RFHDQV RQ DWPRVSKHOULF \$FRPLRULQDLR QV RQ EOX PLO  
WR VWXGHQW V QHHGV FKHPLFDO WUDFHUV UHGR[ FKHPLVWU\ K\GUR  
PHWKRGV VWDEOH LVRWRSH VWXGLHV &KHPLFDO RFHDQRJUDSK\ LV DO  
QHFHVVDU\ WR XQGHUVWDQG WKH RFHDQ

&RXUVH 7KLV RFHDQ LV FHQWUDO WR WKH FOLPDWH V\VWHP DQG WKH QD  
FRXUVH LV WR SURYLGH RFHDQ OLWHUDF\ WKDW ZLOO HQDEOH XQGHUV  
ELRJHRFKHPLFDO F\FOLQJ RI HOHPHQWV \$GGLWLRQDO JRDOV LQFOXGH  
LPSURYHPHQW RI ZULWWHQ DQG RUDO VFLHQFH FRPPXQLFDWLRQ VNLOO

- FKHPLFDO VSHFLHV ZLWKLQ WKH ZRUOG V RFHDQV
- x ,QWHJUDWH FRQFHSWV RI SK\VLFDO ELRORJLFDO DQG FKHPLFDO SU
  - FKHPLFDO F\FOLQJ LQ WKH RFHDQ SDUWLFXODUO\ WKH FDUERQ F\F
  - x 8VH FKHPLFDO GLVWULEXWLRQV WR LQIHU LQIRUPDWLRQ DERXW SK
  - x 8QGHUVWDQG WKH NH\ FKHPLFDO SURFHVVHV DQG IDFWRUV WKDW L
- JOREDO HQYLURQPHQWDO FKDQJH

([SHFWHG SUHSDUDWBOHQHJUDGHFRXUVH UHH LQ VFLHQFH RU D EDFN  
XQGHUJUDGXDWH FRXUVHV LV QHFHVVDU\ &RPSHWQFH LQ DOJHEUD L  
HTXDWLRQV DUH XVHIXO IRU VRPH WRSLFV EXW DUH QRW UHTXLUHG 20  
OHYHO DUH QHFHVVDU\ RUJDQLF FKHPLVWU\ LQRUJDQLF FKHPLVWU\ D

SUHVHQWDERQ RDUG ZLOO EH XVHG WR GLVWULEXWH FODVV LQIRUPDW

1RW7HKL V LV D VWDFNHG OHYHO FRXUVH 7KH PDWHULDO FRYHUHG  
WKH JUDGLQJ ZLOO GLIIHU \*UDGXDWH VWXGHQWV ZLOO KDYH WR DQVZ  
H[DPV DQG ZLOO EH H[SHFWHG WR OHDG FODVV GLVFXVVRQV DW D KLJ  
JUDGXDWH VWXGHQWV ZLOO DOVR EH JUDGHG PRUH FULWLFDOO\ FRPSDU

&RXUVH &RPSRQHQWV

\*UDGLQJ

&ODVV 3DUWLFLSDWLRQ ! \$  
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\*UDGHV IRU HDFK FDWHJRU\ ZLOO EH ZHLJKWHG DV VKRZQ DEFRYHU  
ZLOO EH QR H[WUD FUHGLW DVVLJQPHQWV <RXU RYHUDOOIUDGHJUDGG  
DUH DVVLJQHG 2QO\ ZKROH OHWWHU JUDGHV ZLOO EH DVVLJQHG QR S

7H[WPHUVRQ DQG **Chemical Oceanography and the Marine Carbon**  
UHIHUHG WR DV <sup>3</sup>( + ' EHZ  
\$VVLJQHG UHGLQJV IURP RWKHU WH[WV DUWLFOHV ZLOO EH SURYLGH  
\$GGLWLRQDO WH[WV \RX PLJKW ILQG XVHIXO

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