MSE WORKSHEET No.4 Thursday, April/ 22/2021

HRNO.( )	NAME( )	

Experiment 1 Salinity Currents ( )

Objectives

Objective (1) Salinity refers to the amount of salt dissolved in water.

Objective (2) In this experiment, you investigate the movement of colored water with different salinity.

英単語と日本語意味のマッチングをしよう。

amount , colored , current(s) , different , dissolved , investigate , movement , refer to , salt , salinity ,

NOUNS (名詞)		
	English	Japanese
1		**塩分**
2		**量**
3		**塩**
4		**流れ**
5		**動き**

VERBS (動詞)		
	English	Japanese
6		**～について述べる**
7		**～について調べる**

PARTICLES (分詞)		
	English	Japanese
8		**溶け込んだ**
9		**色づけされた**

ADJECTIVE (形容詞)		
	English	Japanese
10		**異なる**

MSE WORKSHEET No.5 Monday, April/ 26/2021

HRNO.( )	NAME( )	

Experiment 1 Salinity Currents

( )

Materials

( )

英単語と日本語意味のマッチングをしよう。

dispensing spoon , food coloring , fresh water bottle ,
plastic bottle(s) , plastic lid , salty water bottle ,
seawater , tap water , tornado tube , towel ,

	English	Japanese
1		ペットボトル
2		トルネード　チューブ
3		水道水
4		海水
5		プラスチックのふた
6		食用着色剤
7		薬さじ
8		タオル
9		真水用ボトル
10		塩水用ボトル

MSE WORKSHEET No.5’ Monday, April/ 26/2021

では次に、いよいよ Procedures のスライドを見てみましょう。（本日は語句の予習のみ。）

Procedures ( )に登場する重要語句

英単語と日本語意味のマッチングをしよう。

Bend down , carefully , Fill , gently , Invert , Lay , Observe , Place , Prepare , Press down , room temperature , Screw , Shake , Slide away

	English	Japanese
1		準備する
2		満たす
3		ねじり込む
4		置く
5		押さえる
6		注意して
7		逆さまにする
8		そーっと (やさしく)
9		室温の
10		振る
11		引き抜く
12		横たえる
13		観察する
14		かがむ

MSE WORKSHEET No.6 Thursday, May/ 6/2021

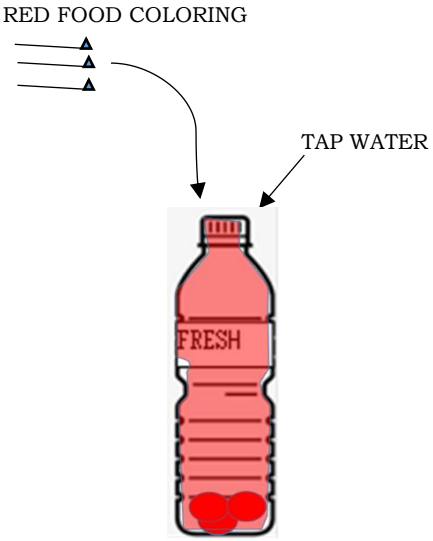
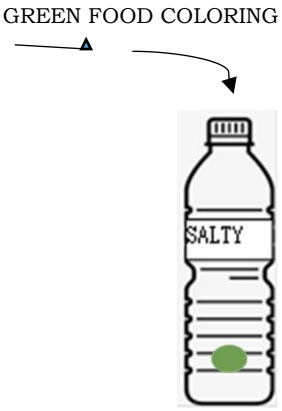
HRNO.( )	NAME( )	

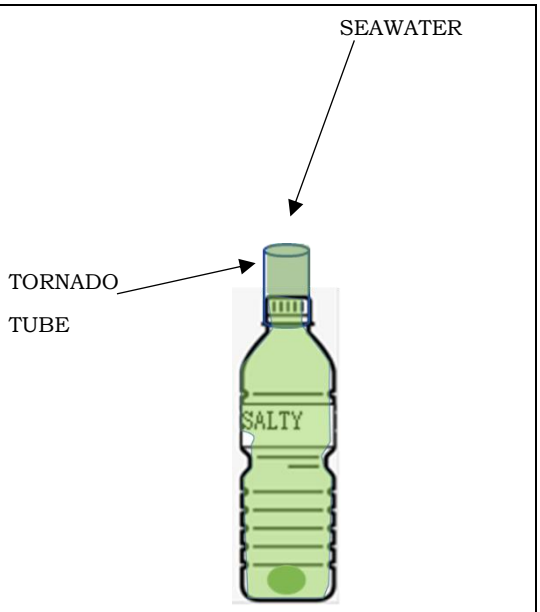
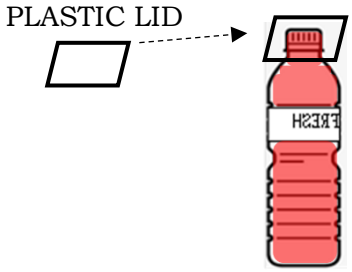
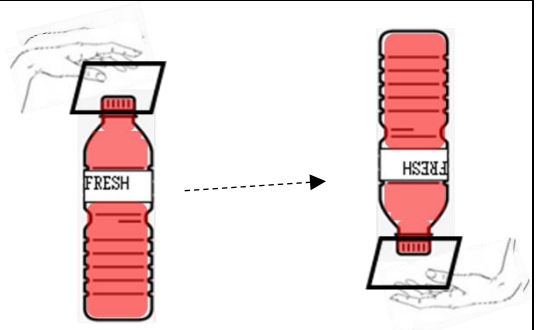
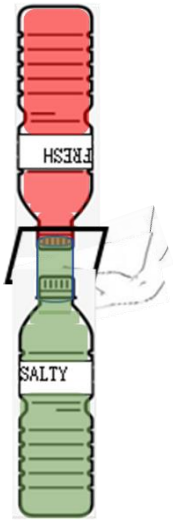
Experiment 1	Salinity Currents	塩分差による水流の発生

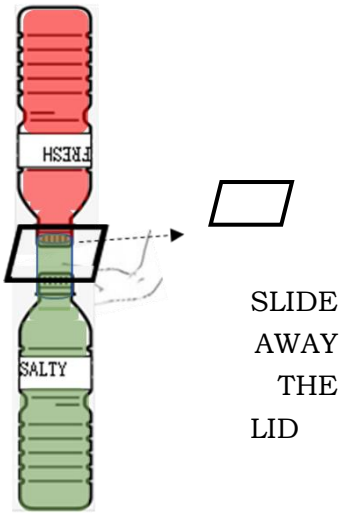
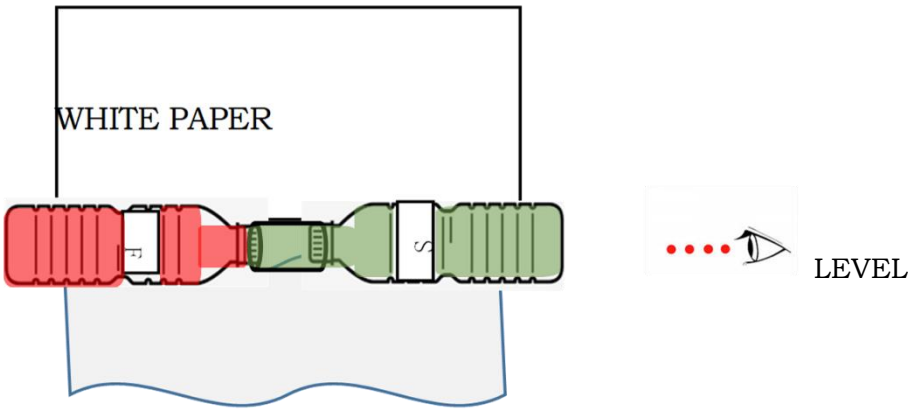
Procedures

前半部分

( )

1	Prepare <u>two</u> plastic bottles.	
2	<u>One</u> is the fresh water bottle. <u>The other</u> is the salty water bottle.	
3	Put three dispensing spoons of red food coloring in the fresh water bottle.	
4	Fill the fresh water bottle to the top with room temperature tap water. Shake the bottle carefully.	
5	Put one dispensing spoon of green food coloring in the salty water bottle.	

6	Screw the tornado tube tightly onto the salty water bottle.	
7	Fill the salty water bottle to the top of the tornado tube with seawater. Shake the bottle gently.	
8	Place the plastic lid over the fresh water bottle.	
9	Press down the plastic lid and invert the fresh water bottle.	
10	Put the fresh water bottle on the tornado tube.	

11	Slide away the plastic lid and screw the two bottles together.	
12	Place a white piece of paper behind the bottles. It should be easier to observe the movement of the colored water.	
13	Lay the bottles gently on their side on a white towel ; the fresh water bottle on the left side and the salty water bottle on the right side.	
		
14	Bend down until your eyes are level with the bottles.	
15	Don't touch the bottles.	
16	Watch water movement at: 30 seconds, 50 seconds, 75 seconds and four minutes.	
17	Complete the data sheet.	
18	Clean up for the next group.	

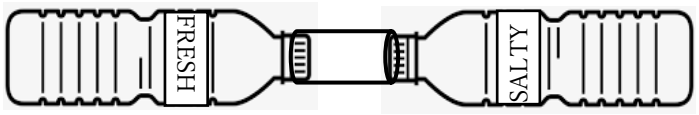
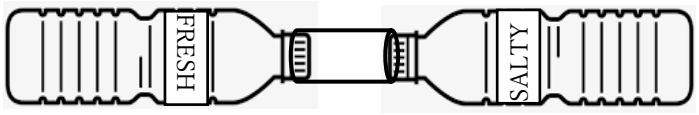
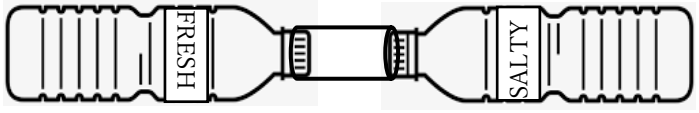
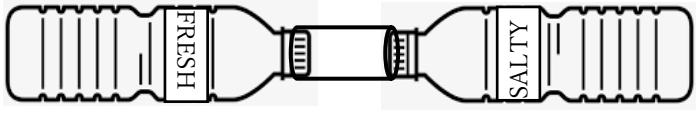
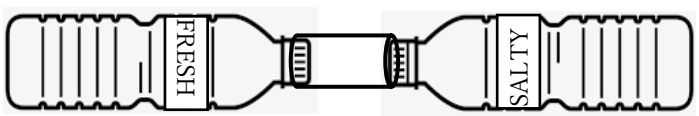
MSE WORKSHEET No.7 Monday, May/ 10/2021

HRNO.( )	NAME( )	

Experiment 1 Salinity Currents 塩分差による水流の発生

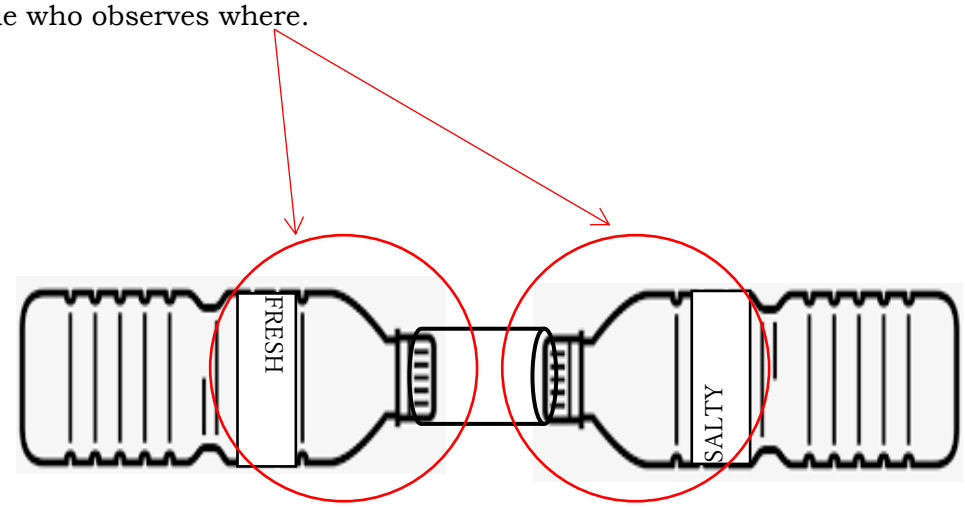
Prediction ( )

1. Use two different kinds of water :
   red-colored tap water and green-colored seawater.
   (left side) (right side)
2. Mark your prediction about the movement of each water at
   30seconds, 50 seconds, 75seconds and 4 minutes.

START	
30seconds later	
50 seconds later	
75 seconds later	
FINISH 4 minutes	

3. Cooperation is very important. Help your group member.

4. Decide who observes where.



student's name ( ) ( )

5. Hypothesis (you can write your hypothesis in Japanese)

MSE WORKSHEET No.8 Thursday, May/ 13/2021

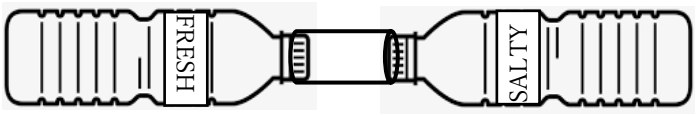
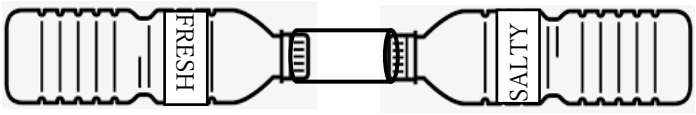
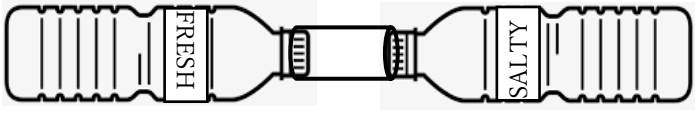
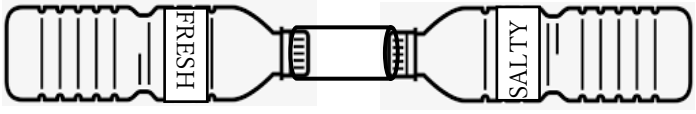
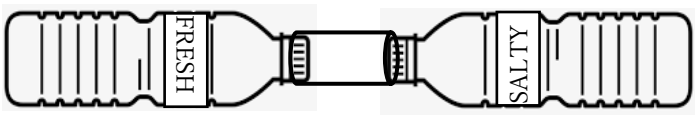
HRNO.( )	NAME( )	

Experiment 1	Salinity Currents	塩分差による水流の発生

Data sheet for Result ( )

1. Use color markers on the illustrations below.
   Red-colored tap water on the left and green-colored seawater on the right.

2. Mark your prediction about the movement of each water at
   30seconds, 50 seconds, 75seconds and 4 minutes.

START	
30 seconds later	
50 seconds later	
75 seconds later	
FINISH 4 minutes	

3. Did you work well with your group member? (yes / not really)

4. Were your prediction and the result the same? Or were they different?
(same / different)

5. Where or when do you see this phenomenon? Write in Japanese.
( )

MSE　WORKSHEET　　No.9　　Monday, May/17/2021

HRNO.(　　)	NAME(　　)	

Experiment 1　　Salinity Currents　　塩分差による水流の発生

1.　Explain about the result (at 4 minutes) in Japanese.

Next, let's try writing it in English.

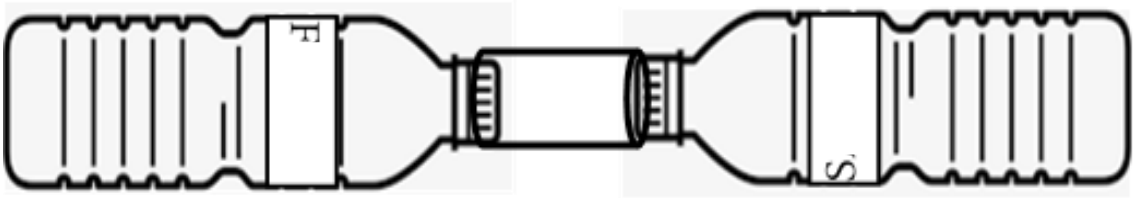
2.　Where do you see this phenomenon?

「　　」

First in ***Japanese***.

Next, let's write in ***English***.

3. Label the three different waters.



Discussion

( )

4. How did this water movement happen?

First in ***Japanese***.

Next, let's write in ***English***.