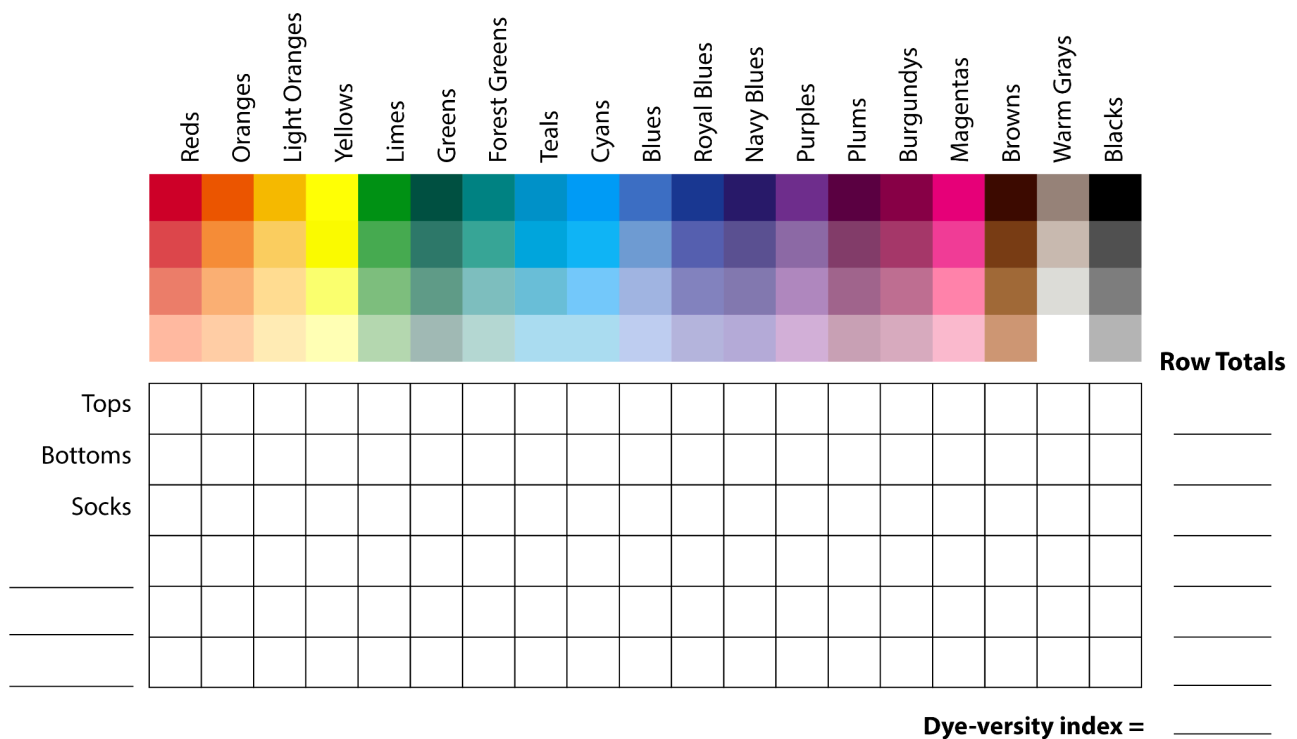


NAME: TEACHER KEY DATE: _____ CLASS PERIOD: _____

Warm-Up | Calculate your “Dye-versity” Index: How many colours are you wearing? This exercise is intended to help us think about how we use different dyes (and the technologies used to create them) to express ourselves through fashion.

- Fill out the chart below, counting up the number of shades of each colour you have for each article of clothing.
- You may fill in backpacks, tattoos, or other dyed items in the blanks.
- Sum your counts for each article of clothing in the last column (Row Totals).
- Sum your Row Totals to get the grand total, the “Dye-versity index.”



Q1: Compare your results with those of others sitting near you. How does your clothing colour profile compare? (Higher, lower, about the same)?

Q2: Does your dye-versity index reflect your personality or mood in any way? Explain.

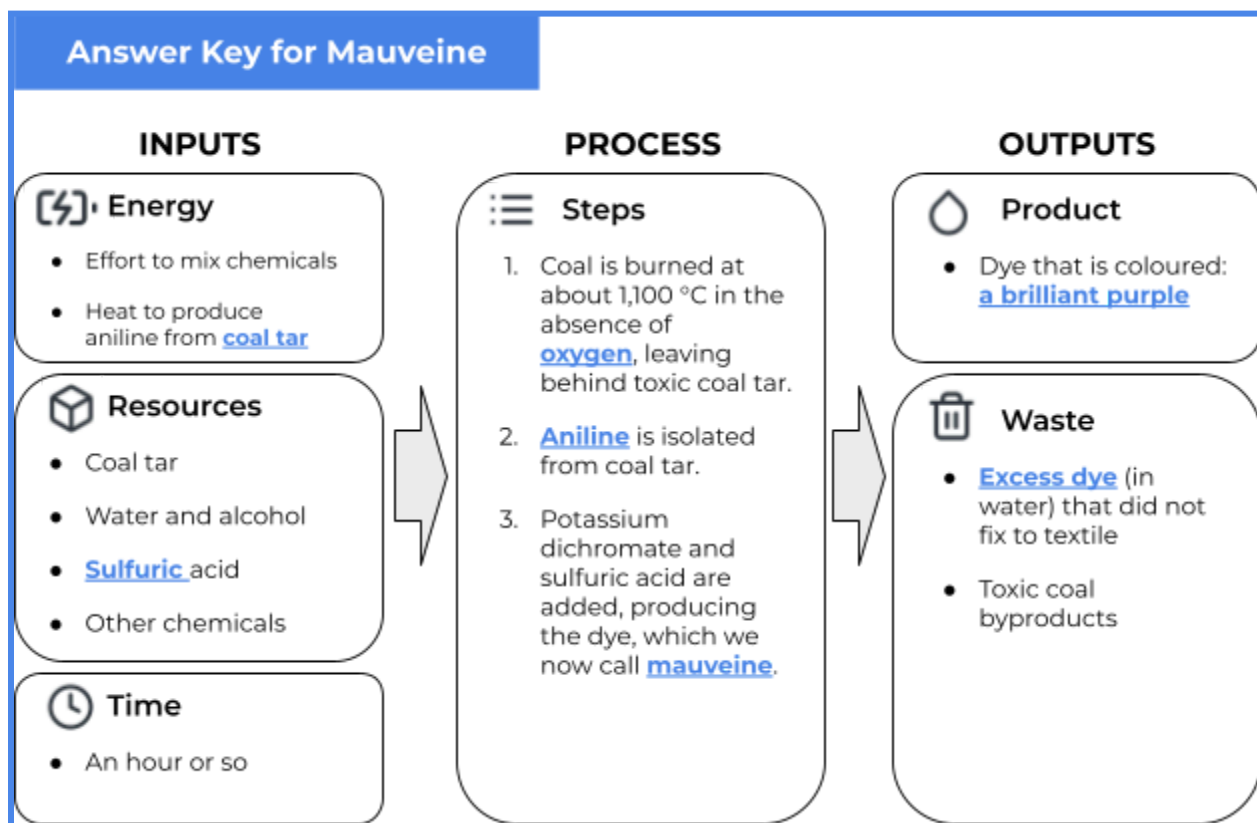
⚠ **Pause here and wait for instructions.**

Q3: Title of your assigned reading: _____

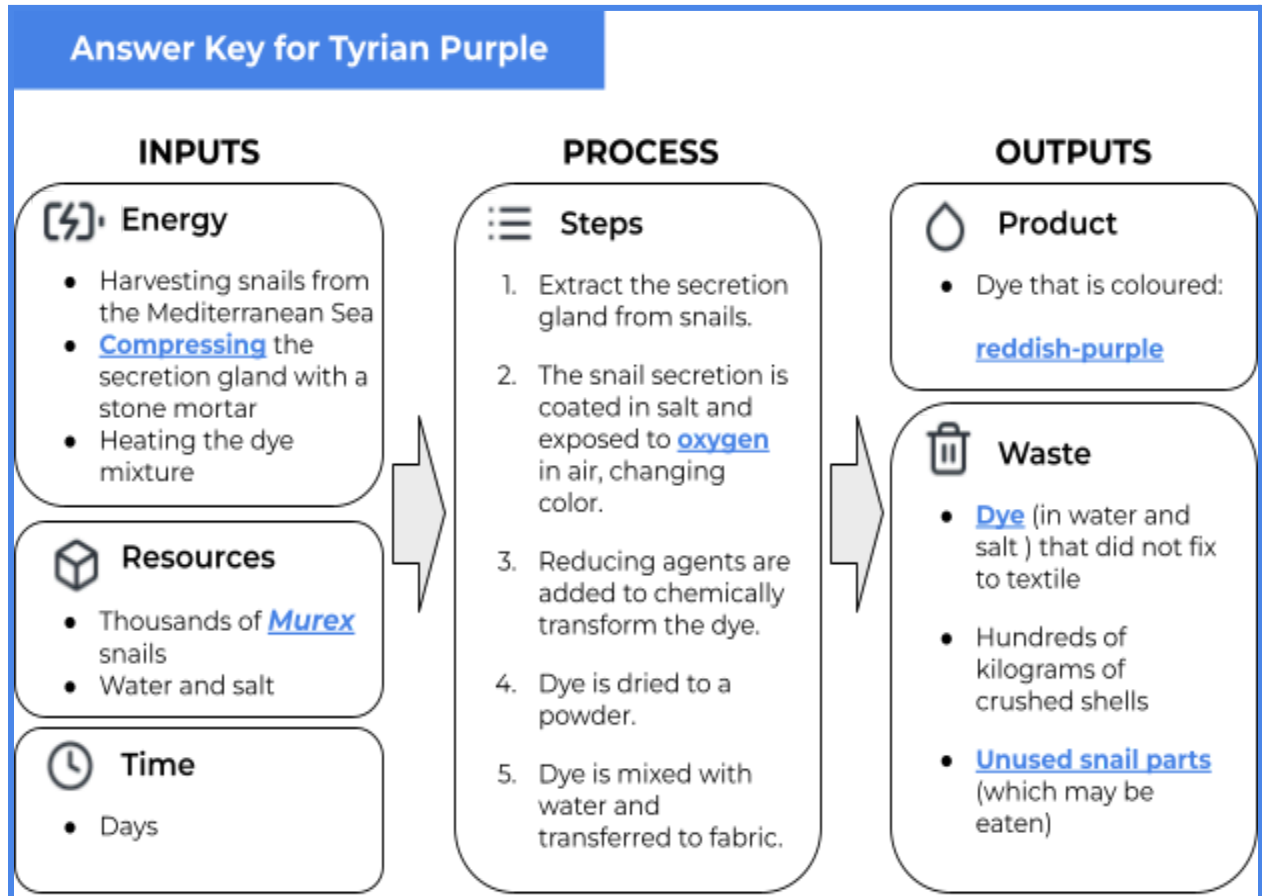
Instructions for Questions 4-6:

- I. After you have read your assigned text, fill out the corresponding concept map for your reading using *italicised text* in your reading.
- II. You may do Q4-6 out of order. Start with the concept for *your* reading.
- III. When you and your group members are done with your assigned concept maps, take turns explaining what you learned. You're the expert.
- IV. Help each other fill out the remaining concept maps. *Everyone does all 3.*

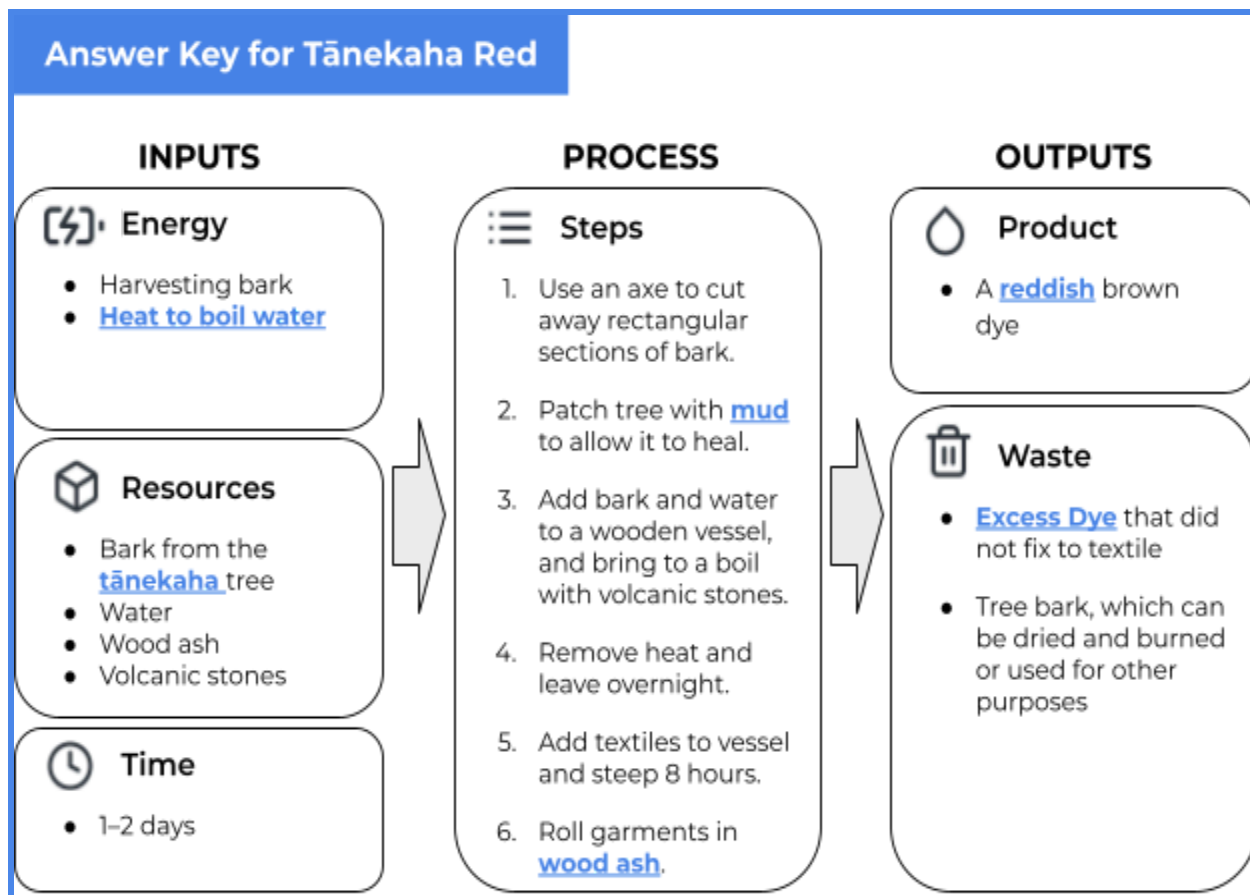
Q4: Fill out the *concept map* for the process described in “The Value of Colour.”



Q5: Fill out the *concept map* for the process described in “Tyrian Purple: Colouring the Thread of History.”



Q6: Fill out the *concept map* for the process described in “Tānekaha Red: Reconnecting to Nature.”



Reading Carefully:

Work with your groupmates to find the answers to Q7-9 in the three articles.

Q7: Chemists discover unique **chemical processes**. In contrast, chemical engineers enhance these processes to create **large amounts of a product** that people want.

(From the 2nd-to-last paragraph of the mauveine reading.)

Q8: Natural dyes connect a garment and its wearer to **the place where the dye was harvested**.

(From the paragraph near top of Page 6/6 that begins: “Tānekaha red dye is culturally significant...”)

Q9: In historical times, the colour purple was only worn by the very rich and powerful because of the time-consuming production process and the huge number of snails required.

(From the paragraph above the glossary on Page 4/6 (Tyrian Purple) that begins: “Because of the time-consuming production process...”)

Q10-Q17: Refer to the concept maps for each technology to fill out the table below.

Category	MAKE A CLAIM: Which technology best embodies each category? (Options: Tyrian purple, mauveine, Tānekaha red; all can be repeated.)	EVIDENCE: In 1 sentence, explain your best evidence supporting this claim.
Sustainability (reduced waste or pollution)	Q10 <i>Tānekaha red</i>	Q11 <i>Since the bark heals and the waste bark is useful (for burning), this seems like the most sustainable option.</i>
Cultural significance (connected to historical or personal meaning)	Q12 <i>Tānekaha red (or Tyrian purple)</i>	Q13 <i>Tānekaha has deep significance, because it connects people to the place from where the bark was harvested and the dyeing practice has been passed down for hundreds of years. (Tyrian purple also has a long legacy, but was only available to a small group of rich and powerful people). *Both answers should be appropriate, if well-reasoned.</i>
Status Signalling (used to demonstrate one’s class or wealth)	Q14 <i>Tyrian purple</i>	Q15 <i>This was the only dye that was connected to class or status, because it could only be afforded by extremely rich people.</i>

Efficiency (Minimal use of time or materials)	Q16 <i>mauveine</i>	Q17 <i>This dyeing process is much faster (hours versus days) than the other 2 processes. *Not stated explicitly, but students may also point out that the chemicals used to make mauveine are all highly concentrated, making efficient use of inputs.</i>
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Q18: If you could talk to an expert in one of these dyeing technologies, what clear, thought-provoking question would you ask them?

It's up to you how you want to grade these. We're just aiming to stoke students' curiosity and hone their skills of inquiry.