

Activity: Macromolecule Spoons Game

Objective: Students will match characteristics of macromolecules in this fast-paced review card game.

Goal of the Game: To collect 4 cards that all describe one macromolecule (protein, lipid, carbohydrate, or nucleic acid).

Teacher Instructions:

Set-up:

Print the 3 pages of cards single-sided onto cardstock or paper. If using paper, it may be helpful to laminate the cards so they last longer. Laminated cards should hold up well to be used every year.

Divide your students into groups of 3 or 4. Each group gets a full set of 24 cards.

Students shuffle the cards and deal 4 cards to each group member (upside down). After dealing, group members may look at their 4 cards, but should not show them to others.

One student starts with the rest of the cards in a pile upside down next to him. This is the Draw Pile.

Put several spoons in the middle of the group. There should be one less spoon than the number of group members. (ex: 4 group members → 3 spoons)

Game Play:

The student with the rest of the cards (Player 1) chooses one card off the top of the Draw Pile

If this student wants to keep the card to help make a set of similar cards (all of the same macromolecule), he can keep the card and discard another from his hand. If he does not want to keep the card he picked up, he can discard that one.

The discarded card gets passed to the next student (Player 2). This student has the choice to keep this card or pass it to the next player. Again, one card is discarded and passed to Player 3. Repeat for Player 4.

The card that Player 4 discards gets put in a discard pile. If more cards are needed to continue the game, this discard pile can be reshuffled and used as the draw pile for Player 1.

When one student makes a match of 4 cards, they pick up a spoon. As soon as that player picks up a spoon, the other players try to grab the remaining spoons. The player that is unable to get a spoon gets an "S".

All cards are reshuffled and dealt, and a new round begins. Game play continues until one group member has spelled out the word "SPOONS" by losing 6 times.

Macromolecules

Protein

Macromolecules

Carbo-
hydrate

Macromolecules

Lipid

Macromolecules

Nucleic
Acid

Macromolecules

CHON

Macromolecules

CH₂O in a
1:2:1 ratio

Macromolecules

CH with
a little O

Macromolecules

CHONP

Macromolecules

Regulate cell
process,
form bones
& muscles,
transport
materials

Macromolecules

Provide
structural
support &
quick
energy

Macromolecules

Provide long-
term
energy, form
membranes
& act as
chemical
messengers

Macromolecules

Store
genetic
information
for cells in a
code

Macromolecules

Made of
amino acid
monomers

Macromolecules

Made of
simple
sugar
monomers

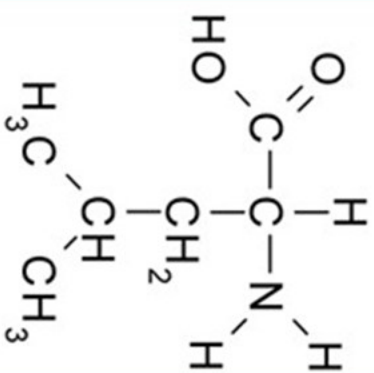
Macromolecules

Made of
fatty acids
& glycerol

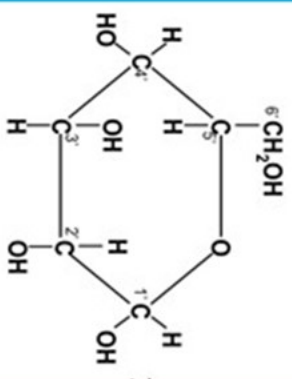
Macromolecules

Made of
nucleotide
monomers

Macromolecules



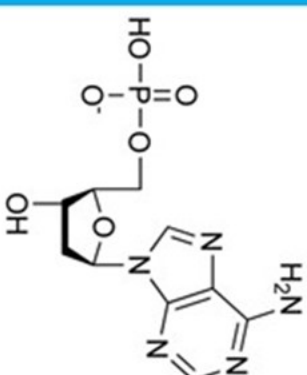
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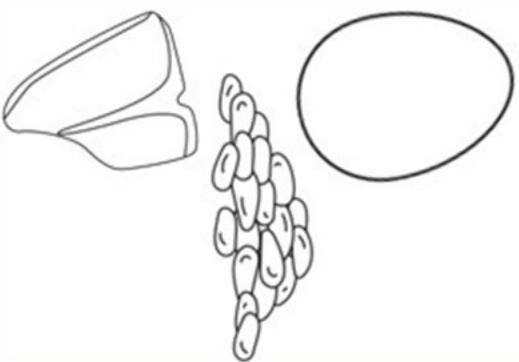
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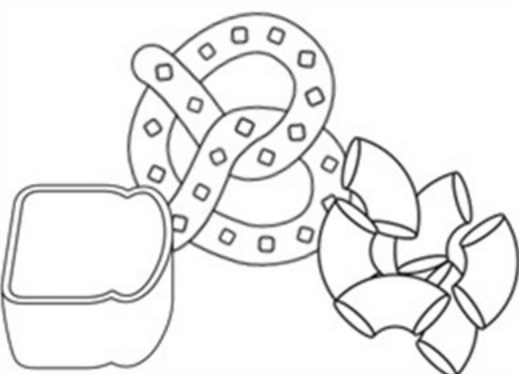
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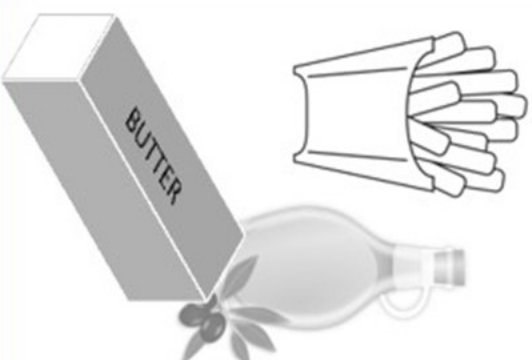
Macromolecules



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