

What to counterbalance: order of passages, order of prequestions, positioning of response images for 4-choice questions.

**Versions: different combinations of question/passage orders and response image positions**

**V1:** order 1, positions 1

**V2:** order 2, positions 1

**V3:** order 3, positions 1

**V4:** order 1, positions 2

**V5:** order 2, positions 2

**V6:** order 3, positions 2

Passage orders:

**Order 1.**

Damselflies

Milkweed

Shoreline

Nectar

Toe biters

Oregon

**Order 2.**

Nectar

Shoreline

Oregon

Toe biters

Milkweed

Damselflies

**Order 3.**

Toe biters

Oregon

Damselflies

Milkweed

Shoreline

Nectar

*Yellow means more related to the bees presentation, blue means more related to the watershed presentation*

Prequestions orders: first letter is the paragraph (T for toe biter, O for Oregon silverspots, D for damselflies, S for shoreline, N for Nectar, M for Monarchs), second is question type (Literal, Inference, Taxonomic or Easy), third is 2- or 4-choice.

Options: TL4, TI4, TT2, TE2, OL4, OI2, OT4, OE2, DL2, DI4, DT2, DE4, SL2, SI4, ST4, SE2, NL4, NI2, NT2, NE4, ML2, MI2, MT4, ME4

Constraints: all question types (LITE) evenly spread throughout, no two consecutive questions can be about the same passage, each page has one 2-choice and one 4-choice question.

Order 1:

OL4, DT2, SI4, TE2, NI2, MT4, TL4, OE2, ML2, DE4, NT2, DI4, TT2, NE4, SL2, TI4, OI2, ME4, DL2, OT4, SE2, NL4, MI2, ST4

Order 2:

DT2, NL4, OE2, SI4, ML2, DI4, TE2, ST4, MT4, SE2, NI2, OL4, TT2, NE4, OI2, TL4, ME4, SL2, TI4, NT2, DE4, MI2, OT4, DL2

Order 3:

TE2, DI4, ST4, ML2, NI2, OL4, MT4, SE2, NT2, ME4, SI4, DL2, OE2, TI4, OT4, SL2, TT2, NL4, OI2, DE4, TL4, MI2, DT2, NE4

Answer image positioning:

**Positioning of correct answer for each question type, for positions 1:**

	TL	TR	BL	BR
T:	1		1	1
L:		1	1	1
E:	1	1		1
I:	1	1	1	

**For positions 2, the correct answer for each question was in the opposite corner as in P1, and the other images randomly reshuffled.**

	TL	TR	BL	BR
T:	1	1		1
L:	1	1	1	
E:	1		1	1
I:		1	1	1