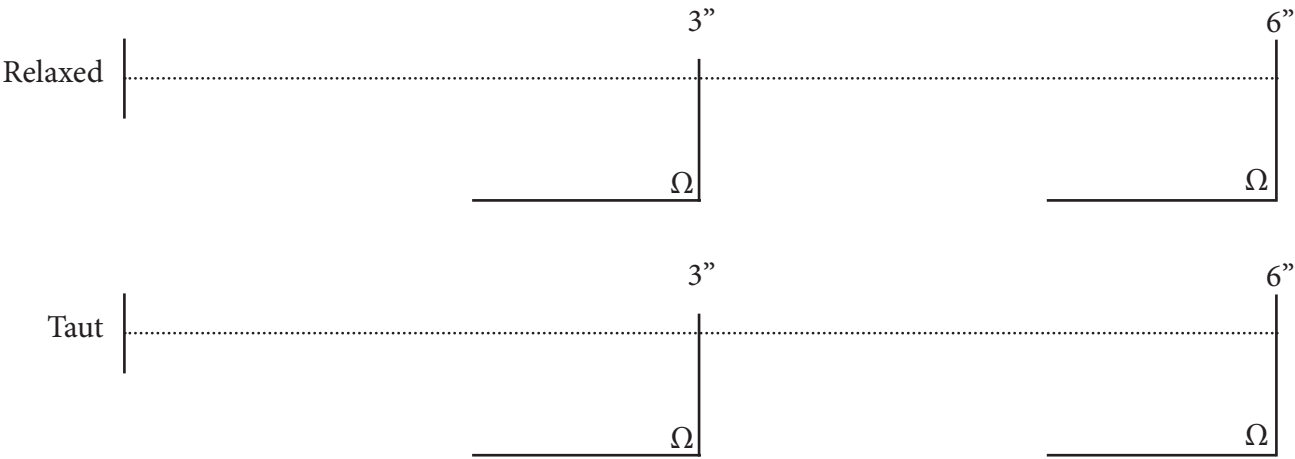


EXPERIMENTAL TEXTILES
Understanding Conductive Yarns

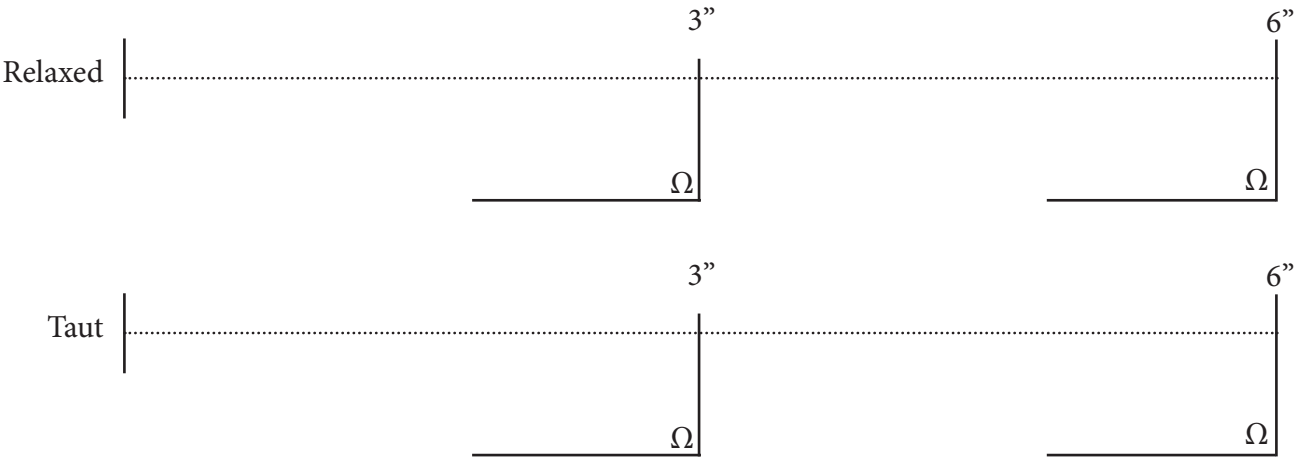
Name:

Sample 1: _____



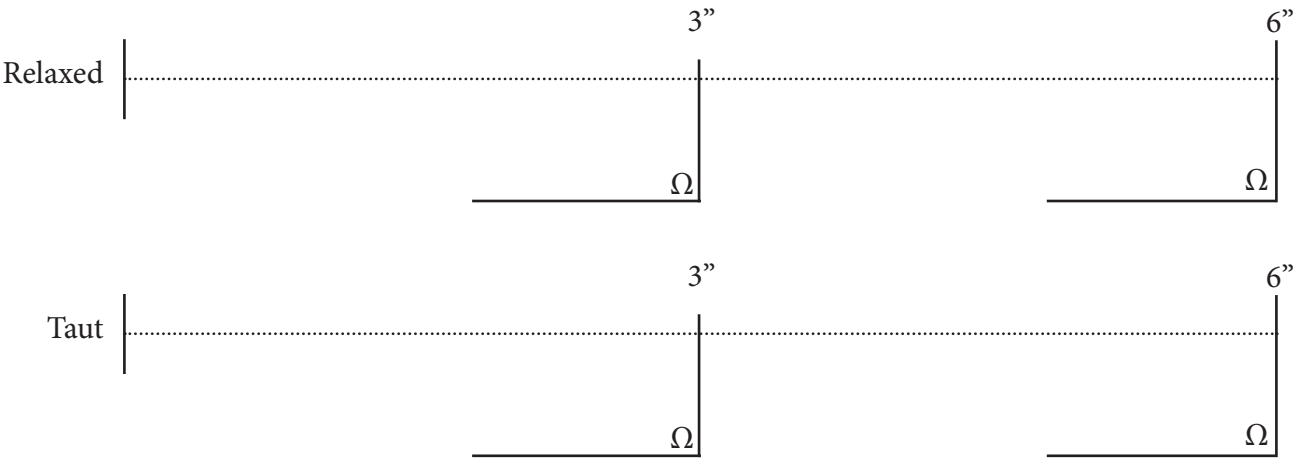
How does resistance change with length and tension? Why? Consider the structure of the yarn.

Sample 2: _____



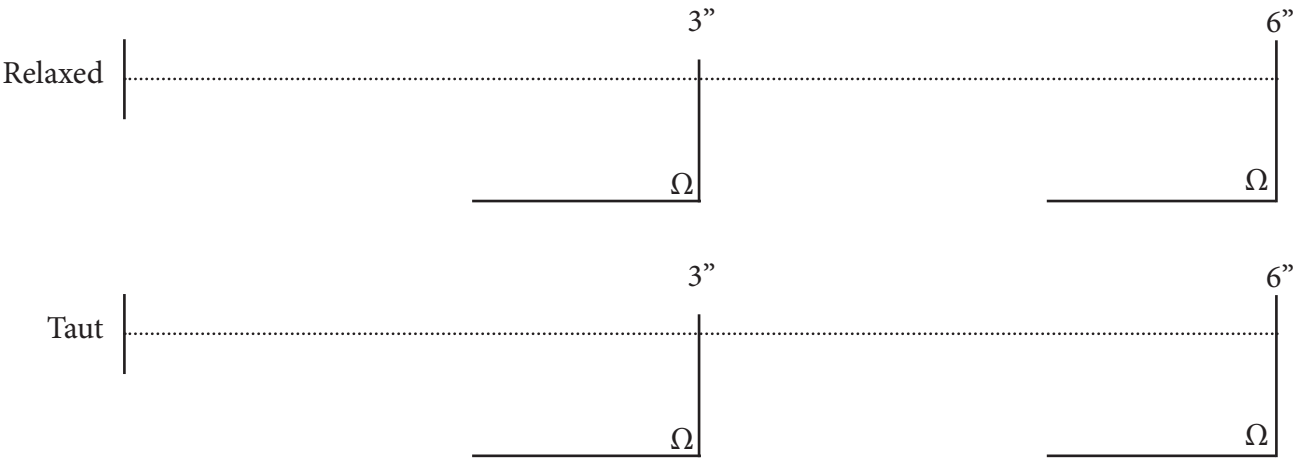
How does resistance change with length and tension? Why? Consider the structure of the yarn.

Sample 3: _____



How does resistance change with length and tension? Why? Consider the structure of the yarn.

Sample 4: _____



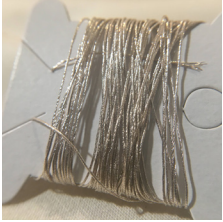
How does resistance change with length and tension? Why? Consider the structure of the yarn.

EXPERIMENTAL TEXTILES

Understanding Conductive Yarn Structures

The images below describe how the metal and non-metal elements of the yarn are oriented. This can help explain resistance behaviors. Each row contains an: image; generalized cross-section (with black representing metal and outlined representing non-metal); and a generalized drawing of the length of the structure

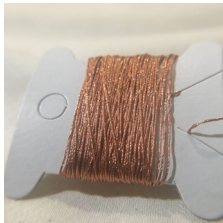
Karl Grimm Silver



filaments
wrapped in metal
then spun together

source: kobakant - <https://www.kobakant.at/DIY/?p=8012>

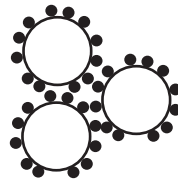
Karl Grimm Copper



filaments
wrapped in metal
then spun together

source: kobakant - <https://www.kobakant.at/DIY/?p=8012>

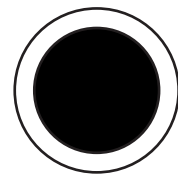
Statex



spun from synthetic
fibers or filaments,
then coated in thin
layer of metal

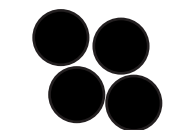
source: kobakant - <https://www.kobakant.at/DIY/?p=8012>

Magnet Wire / Silicone Coated Wire



continuous metal
filaments coated in
either silicone or
polyurethane

Spun Stainless



spun from
conductive
fibers or filaments

source: kobakant - <https://www.kobakant.at/DIY/?p=8012>