

GHOST Compositional Triplet Data



Object-Level Data (Bat)

Objects:

A {object} is visible in the image

Attributes:

The color of the bat is {attribute}

Relations:

The bat is {relation} the helmet

Consistency Check Rounds

Triplet 1 +

Triplet 2 -

Triplet 3 -

bat

ball

purse

brown

green

blue

left of

right of

in the

GHOST Consistency Score (GCS)

Consistency Check (CC)

MLLM

brown +

green -

blue -

Hallu-Free

Acc

GCS(CC)

Does the MLLM truly understand the image?



True

True

True



33.3

14.2

<image> The color of the bat is {attribute}?



True

False

True



66.6

42.8

1) brown

2) green

3) blue?



True

False

False



100.0

100.0