



At Muscular Dystrophy UK, we work hard to improve the lives of those effected by a range of muscle-wasting conditions through fundraising, research, and support. With exciting campaigns like Go Bright, we increase awareness of our cause whilst raising vital funds to aid it. Thank you for doing your part!

**Go Bright is dress down day with a twist!** Wear one bright item of clothing – this can be as small as a sock, headband or belt – or go all out with a whole colourful outfit and accessories. With every pupil and teacher joining in and giving a small donation, it's guaranteed to be a fun day that will help brighten the future for every child and adult in the UK living with a muscle-wasting condition!

These lesson activities have been designed to help both students and teachers make the most of the day, providing an insight into the reality of Muscular Dystrophy whilst still being fun and engaging. From muscle models to colours wheels, there's plenty of activities to ensure a memorable day and we hope that Go Bright will continue to be a valuable part of your school year, year after year.

**Thank you for taking part in Go Bright 2023, and we hope your school has a fantastic day!**

## Contents

<b>PE</b>	Circuits	Page 2
	Muscle Mania	Page 3
<b>Art</b>	Complementary Colours	Page 4
<b>Science</b>	Muscle Models	Page 5
	Muscle Game	Page 7
	Muscle Worksheet	Page 7
<b>PSHE</b>	Muscles in daily life	Page 8
	Similarities and differences	Page 8
	Empathy of muscular dystrophy	Page 11
<b>Additional Assembly Activity</b>	Simon says	Page 14



## PE

### Circuits

1. Ask for a volunteer and point out the different muscle groups on their body/demonstrate this on your own body.
2. Demonstrate circuits using all the main muscle groups – do as many as you can for 1 minute with a 30 second rest, go again on the same exercise for 1 minute. Have a 1–2-minute rest in between exercises.
3. When setting up and showing each exercise at the beginning, talk about which muscles each exercise is targeting.
4. After the session test the class on which exercise works which muscles.
5. Talk about how their muscles will tear during exercise and then build back stronger.
6. People with muscular dystrophy can't repair their muscles so easily when they use them so they will get weaker over time.

- Biceps – Bicep curls
- Triceps – Triceps dip with bench
- Glutes (and quads) – Squats
- Quads (and glutes) – Forward lunge
- Hamstrings (and glutes) – Good mornings
- Calves – Calf raises
- Chest/pecs (and lats and arms) – Press ups
- Shoulders (and chest) – Inchworm
- Abdominals – Plank
- Lats (and glutes) – Bird-dogs
- Cardio (heart) – Sprints



## **Muscle Mania**

1. Ensure the children have enough space to move around freely.
2. Go through the below list and associated actions to familiarize the children with their muscles, the role they play and the names of those muscles.
3. First review the muscles in the order written below. Then mix up the order when students are familiar with the muscles, key phrases, and movement actions.
4. As the students get better at identifying and knowing the muscles, increase the pace of the activity.
5. Instead of the teacher calling out the muscle and/or key phrase, the teacher can perform the movement and have the students call out the muscle and/or key phrase while also performing the movement.

**TRAPEZIUS:** The TRAP muscles. Have students TRAP their right ear to right shoulder and then TRAP their left ear to left shoulder.

**BICEPS:** The BICYCLE muscles. Have students rub their biceps and remind them that a bicycle has two wheels, and the biceps have two parts.

**TRICEPS:** The TRICYCLE muscles. Have students rub their triceps and remind them that a tricycle has three wheels, and the triceps have three parts.

**PECTORALS:** The KING KONG muscles. Have students' pound on their chest like King Kong.

**ABDOMINALS:** The DOMINO PIZZA muscles. Have students rub their abdomen (stomach) and remind them it's where the pizza goes.

**GLUTEUS MAXIMUS:** The GLUE muscle. Have students GLUE (sit) their bottoms to the floor.

**HAMSTRINGS:** The HAM muscles. Have students look for a piece of HAM under their upper leg.

**GASTRONEMIUS:** The GAS muscles. Have students rub their calves and remind them that this is where your legs store the GAS to run faster.

For younger or less able pupils, select just 3 common muscles to repeat e.g. biceps, abdominals and gluteus maximus. For older pupils, create small groups and have students take turns leading their group through the activity.



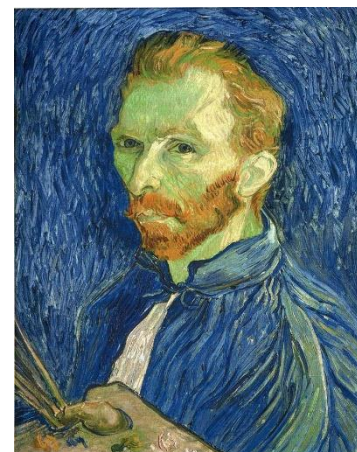
## Art

### Complementary colours

Equipment needed:

- Red, yellow, blue, green, purple, and orange paint for each student
- Paintbrushes
- Paper – 2 sheets per student
- Drawing compass – 1 per student
- Pencils
- Mirrors – 1 per student

1. Welcome students, remind them of/tie into the mission behind Go Bright, encourage volunteers to stand and show off their outfits to the class, ask for inspiration behind them/favourite colours etc.
2. Get the students to draw two circles of 15cm diameter on their first piece of paper:
3. Paint one colour wheel with six sections using just the primary colours to mix the secondary.
4. Paint another colour wheel using both the primary and secondary colours to create even more colours between them. Van Gogh often used blue and yellow in his paintings which are opposite from one another on the colour wheel, they are complementary colours.
5. Have students take inspiration from Van Goghs self-portrait and use whichever complementary colours they would like to paint their own self portrait. Use varying shades of each colour to create depth and for detail.
6. Encourage volunteers to show their self-portraits to the class – what colours did they chose? Did anyone pick the colours they're wearing?





## Science

### Muscle Models

Equipment needed:

- Balloons – 2 per group, different colours
- Cardboard strips, 6cm x 18cm – 1 per group
- Paperclips – 1 per group
- Hole punch – 1 per group
- Sheet with muscle model instructions printed on – alternatively have the class make along with you.
- Worksheet ready for early finishers to start learning the names of the muscles.

Welcome, recap what students already know about the body's anatomy. E.g., skeleton holds up your body but how does it move.

Introduce muscles, include these key points:

- Muscles cover your bones, under your skin and are attached to your skeleton.
- They are responsible for moving your bones and so your body.
- They work in pairs, contracting and expanding/pushing and pulling.
- There are 600 muscles in your body.

1. Hand out equipment individually or divide students into pairs/small groups.
2. Have your students make models of their arm muscles.
3. Fold the cardboard in half.
4. Punch one hole in the middle of one end of the strip and two on either side of the other.
5. Thread the paperclip through the top of each balloon (not the open end) pushing one to the second bend and one all the way to the centre. Then thread one balloon through the single hole, from the outside of the bended cardboard to the inside.
6. Poke each open end of the balloon through one of the two holes at the other end of the cardboard. Hopefully your holes are big enough to do so but small enough for the balloons to be held in place.

7. Bend the "arm" at the "elbow," noticing what happens to the balloons. The one on the inside of the fold will become shorter, or "contract," while the one on the outside will stretch out, or "relax."
8. Explain that the inside balloon is like the biceps muscle and the outside balloon is like the triceps. One relaxes as the other contracts.
9. Differentiation: For younger or less able pupils; have a completed example model already prepared, pre-prepare the cardboard joints and only ask them to attach the balloons. For older pupils; ask the pupils to name the muscles and bones as well.



## **Muscle Game**

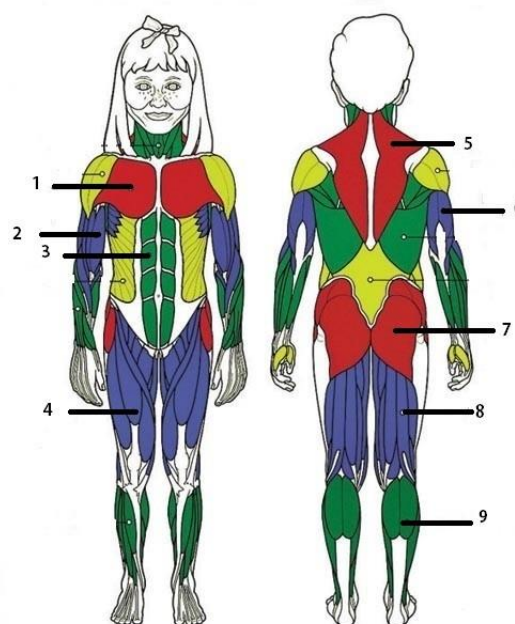
Play a game getting students to tell you which muscle is stretching, and which is contracting when certain movements are performed. Either perform the movements on yourself, a student volunteer, or a skeleton model.

1. Move a joint and point to a muscle.
2. Ask students to put their hand up if they think it is contracting.
3. Ask students to put their hand up if they think it is stretching.
4. Congratulate students that got it correct.
5. Repeat for several other movements.

## **Muscle Worksheet**

Can students identify which muscles are in this picture? (Printable version in Appendix on page 13)  
Put the number from the picture next to the name of the muscles in the list below. Triceps

- Trapezius
- Gastrocnemius
- Hamstring
- Gluteal
- Bicep
- Pectoral
- Quadriceps





## PSHE

Disability can be caused by lots of different things. Muscular dystrophy causes people's muscles to weaken over time, causing disability and making it more difficult for them to carry out everyday tasks.

### **Muscles in daily life**

Ask the class to think of things they use their muscles for. Their answers can be anything as we use them for literally anything! Then ask them to imagine what it might be like if they couldn't do all those things.

### **Similarities and differences**

Below we have provided you with a profile of a child living with muscular dystrophy. Go through this with the class and pull out any similarities with Carmela that they can find and any things that are different about their lives.



**Carmela:**



How old are you? **9 years old**

Where do you live? **Wiltshire**

Who do you live with? **My parents (mum and dad) and dog Tinker.**

Do you go to school? **Yes**

How do you get to school? **Mum drives me.**

How do you get around when you're at school? **I walk with my helmet on if I have lots of energy or I use my walking aid or powerchair if I am more tired.**

What do you learn at school? **Maths, English, History, Science, Music.**

Do you need any extra help while you're at school? **I sometimes need help getting in and out of the specialist chairs I use if I am tired that day.**

What does lunchtime look like for you? **Sometimes I get left along as I eat more slowly.**

What's your favourite thing to have for lunch? **Mini Peperamis and chicken wraps.**

Do you do any activities after school? **No, I am too exhausted after school, but I play video games at home and on the weekends, I play disability sports.**

Do you need to do anything differently to do the things you do for fun? **Yes, I only go to school part time, so I have energy to do physical therapy and fun stuff and have time to recover for the next day of school.**

How is your bedroom decorated? **It's currently being re-decorated in black and neon, gamer style.**

Have you got any things in your room that help with your disability? **Yes, I have a ceiling hoist and a profiling bed.**

What is the best thing in/about your bedroom? **My gaming computer station.**



# Lesson Activities

What are you doing in your photo/when was it taken? **I'm riding a horse at Wilton Riding for the Disabled Association (RDS) as part of my physical therapy. It was midweek during the day after morning school, so I had energy left to take part.**

**Carmela does weekly RDA to help with core stability and general health and mental well-being as they are her favourite animal. She wears a neck collar as her weak neck muscles can't withstand the quick movement of trotting. She has special fluffy seating as she has little muscle to cushion her and soft ring handles to make it easier to hold reins having weak arms.**



**Joe:**



How old are you? **12 years old**

Where do you live? **Harrogate**

Who do you live with? **Mum, Dad and my cockerpoo Dougie.**

Do you go to school? **Yes**

How do you get to school? **Dad takes me.**

How do you get around when you're at school? **Power Wheelchair.**

What do you learn at school? **Lots of different subjects.**

Do you need any extra help while you're at school?  
**Yes, sometimes to write if I'm tired and to chop things in food tech.**

What does lunchtime look like for you? **I take a packed lunch and my friends, and I sit together.**

What's your favourite thing to have for lunch? **Ham sandwiches**

Do you do any activities after school? **No, I'm too tired.**

Do you need to do anything differently to do the things you do for fun? **I have a special power chair for playing football.**

How is your bedroom decorated? **I have a wall that is the New York Skyline and Lord of The Rings posters and a world map.**

Have you got any things in your room that help with your disability? **Yes, my lights and TV work by my Amazon Alexa.**

What is the best thing in/about your bedroom? **My PS5**

Please can you send a photo that you are happy for us to use and describe when/what's happening in it? **This is me and my dog Dougie, I was playing video games.**



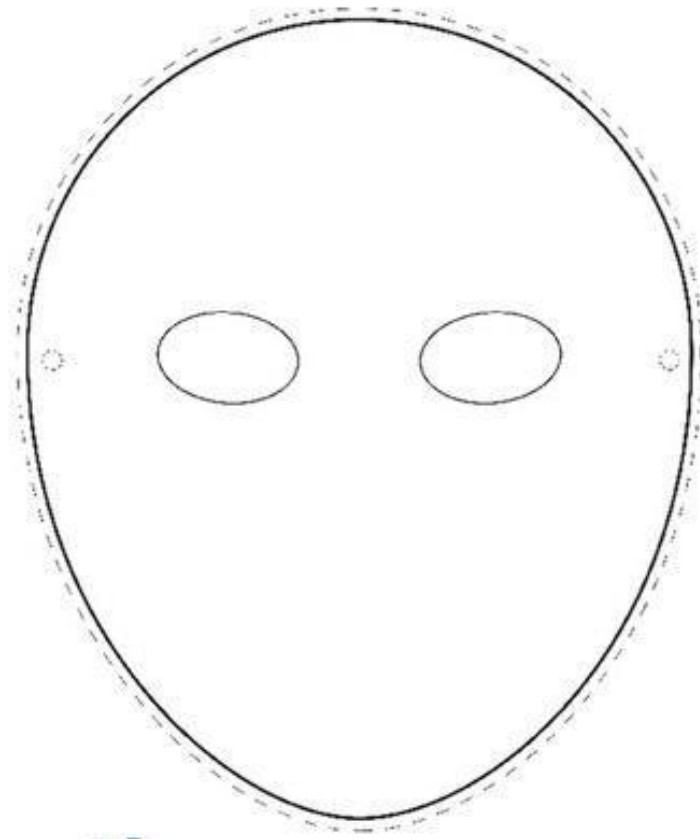
## **Empathy of Muscular Dystrophy**

Resources:

- 1-2 kilo leg weights or alternatively bags of flour within a zip lock bag and tape.
  - Masks cut from template in Appendix on page 14 – prepared with elastic/string attached.
1. Students will then be asked to simulate one aspect of muscular dystrophy by wearing 1-2 kilo weights on their legs to conduct the activities. To make the impact of muscular dystrophy more pronounced half the class could wear weights whilst the others are unencumbered.
  2. Ask the class to complete several tasks, for example:
    - i. Star jumps
    - ii. Short sprint distances
    - iii. A game of hopscotch
    - iv. Climbing stairs – if available
  3. Following the removal of the leg weights, a discussion should take place where the students wearing the weights are given time to express:
    - i. How did it feel to have the weights on your legs and complete the tasks?
    - ii. What things were more difficult?
    - iii. What things were the same?
    - iv. How did wearing the weights make you feel?
  4. Next, get the half of the class who weren't wearing the weights in the previous activity to wear the masks provided. Split into smaller groups and provide the masked pupils with the following charades to act out:
    - i. Feeling sad
    - ii. Feeling angry
    - iii. Feeling happy / excited
    - iv. Feeling scared

5. Following the removal of the masks, a discussion should take place where the students wearing the masks are given time to express:
  - i. How did it feel to not be able to show your emotions?
  - ii. What things were more difficult?
  - iii. What things were the same?
  - iv. How did wearing the masks make you feel?

For younger or less able pupils, choose either the weighted leg activity or masked activity and simplify the questions about how they felt. For older pupils, pupils could make the masks themselves. Also encourage further conversation about representation of people living with disabilities e.g., Paralympians, people of note and those the pupils may know in their family or wider networks, and how they can ensure an open and supportive attitude to people with disabilities.





## Additional assembly activity

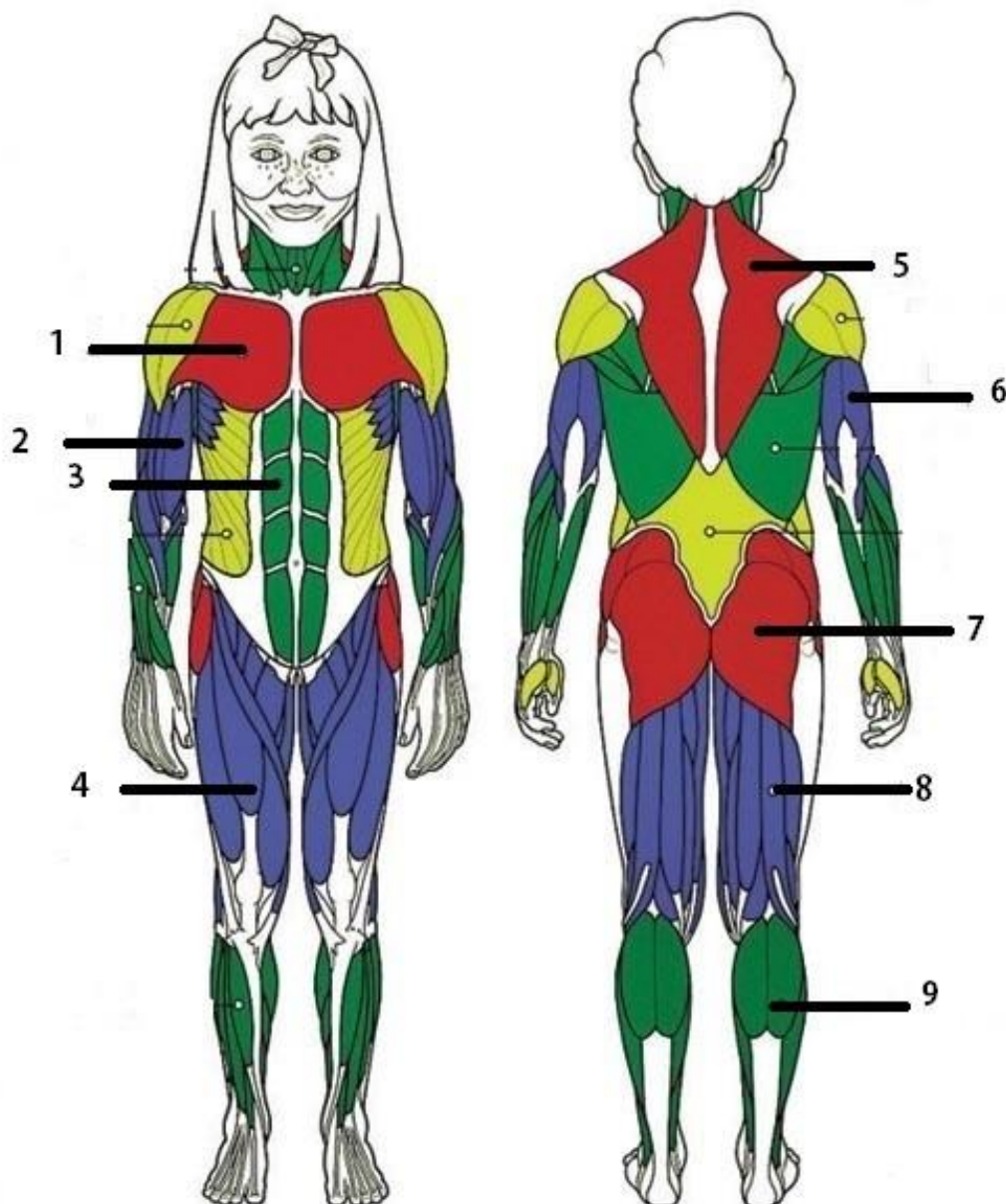
### **Simon Says**

Play a game of "Simon Says" and have students point to different muscles in their bodies. For example, you might say "Simon says to point to the hamstrings" or "Simon says flex your biceps." You might challenge them with an instruction like "Simon says use your quadriceps and hamstrings" and see what activities or exercises they come up with. Then have student volunteers act as Simon and call out instructions.

For younger or less able pupils, instead of using the muscle names, ask the children to point to their arms, legs, abdomen/tummy and make a movement that the limb commonly makes.

## Resources Appendix

### Muscle Worksheet





## Empathy of Muscular Dystrophy Mask

