

Music our Memories Friend or Foe?



[Please click to turn on our music](http://www.hrb-tmrn.ie)

Step 1

Decide on your trial question

Our Question is: Music: Our Memories Friend or Foe?

We were discussing what to do for our trial and in our brainstorming sessions we said we would look at things our parents tell us to do and not to do and would they be right??

Music and homework came up as one of the areas where our parents have rules and we settled on our question. We wanted to see would doing tasks involving our memory (as some of our homework is learning) yield different results if we did them with or without music.

We all have experience where we remember certain memories when we smell a certain smell or hear a certain song - could we prove our parents wrong and show that music can help improve our memory?



V's




Step 2

Register your trial

When we had settled on our question, it was time to register our trial.
We needed to register our trial to let everyone know that there was a trial taking place in our school.

It is important to register trials too in case they have already taken place and you could save duplicating the same trial especially in medical fields - saving time and money!

 **START** START COMPETITION 2017 TRIAL REGISTRATION FORM

Trial Registration Form

.....

Name of school
Cloghan Hill NS

Post number T7432 R
(It starts with a number e.g. 22404)

Name of principal Iscault Mervin

Name of head teacher
.....

Participating classes 3rd, 6th with 14/15 + 16/17 as test subjects

School contact Iscault Mervin

Phone number (093) 47563

Email cloghanr@gmail.com

Name of trial
.....


Music - our children's friend or foe??

By registering under the question or trial being addressed by the students
the site tries to see if our primary improves if we listen to music at home/forever whether it is at our school or our car or if it is a distraction.

1. Complete this form and all of the supporting documentation made available by the IGB, START and email on details of the above mentioned class(es) or school participants in the competition.

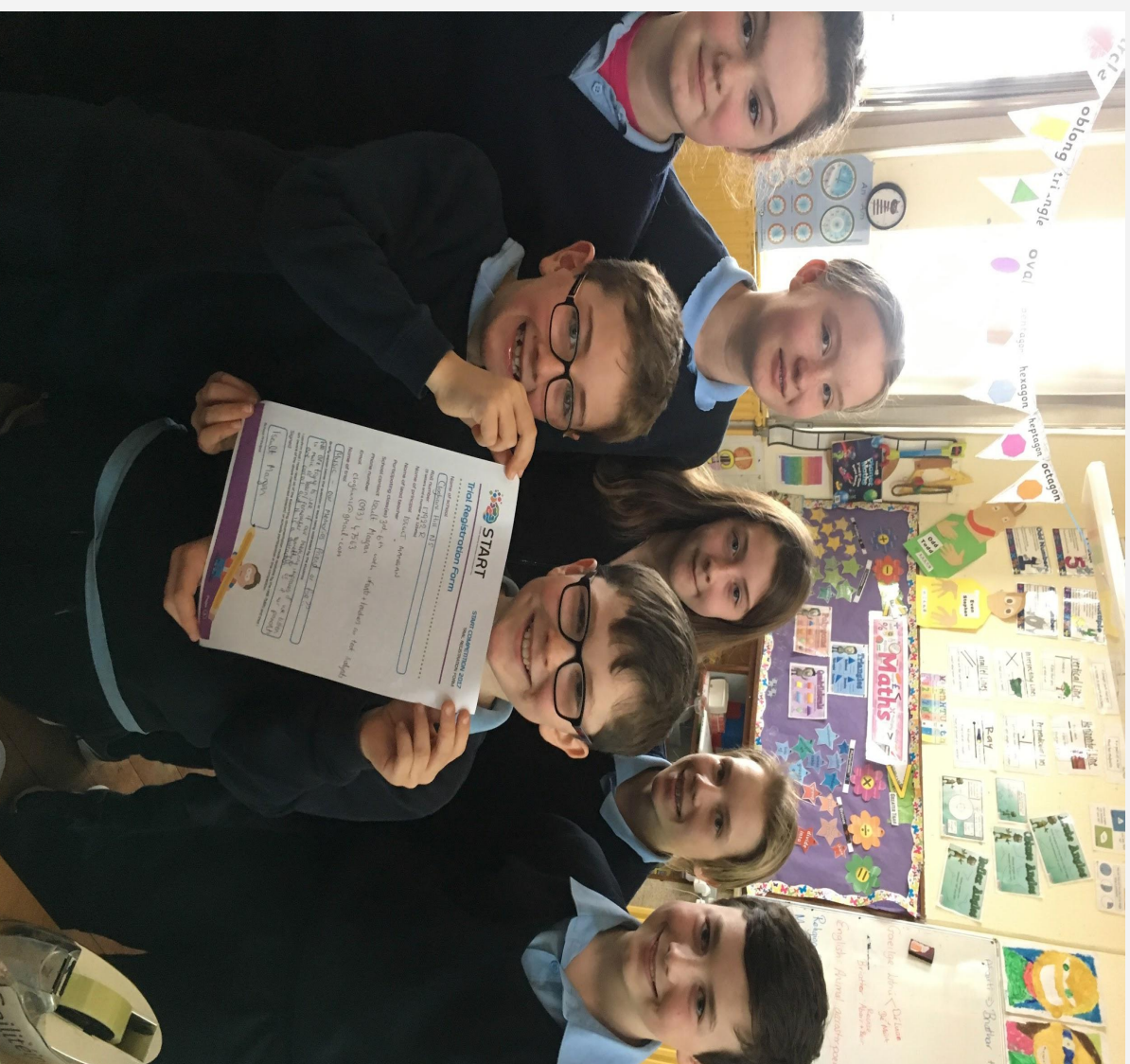
Signed
Iscault Mervin

School Address



Page 1

Our Registration Form ready for sending!



Step 3

Select your outcomes

We now have our question, but how will we assess the differences between our memory with music and without?

We designed three tests which we would administer to two groups of pupils and teachers in our school. One group would complete their tests with music in the background while the other would complete the test in silence. To reach our conclusion we would compare the average results of both groups.

Our tests were:

1. **Letters** - could we remember letters using our short term memory?
2. **Pictures** - could we recall pictures which we were shown for a minute when they disappeared from our screen.
3. **Animal duplication** - how quickly could we spot a picture we had already seen.

Step 4

Identify who is taking part in your study

As we are a small school with a total of 15 pupils, the whole school had to take part in our trial including a teacher and the SNA.



Consent Forms

Before we could begin testing our subjects, we like in any clinical trial needed to get consent from everyone taking part. It is important to get consent before taking part in a trial as without consent, you cannot run your trial.



Signing Our Forms

Step 5

Divide up your Trial Subjects

As our entire school was taking part in the trial, we tried to split the groups fairly. We assigned one adult to each team and then divided the pupils in age and class groups fairly. One infant to each group and so on up the school. We felt this was important to have an accurate reading of the results as we all knew that memory increases with age - up to adulthood when it begins to level out and then eventually decrease!! Our two groups were called:

**THE TEST
GROUP**

**THE CONTROL
GROUP**

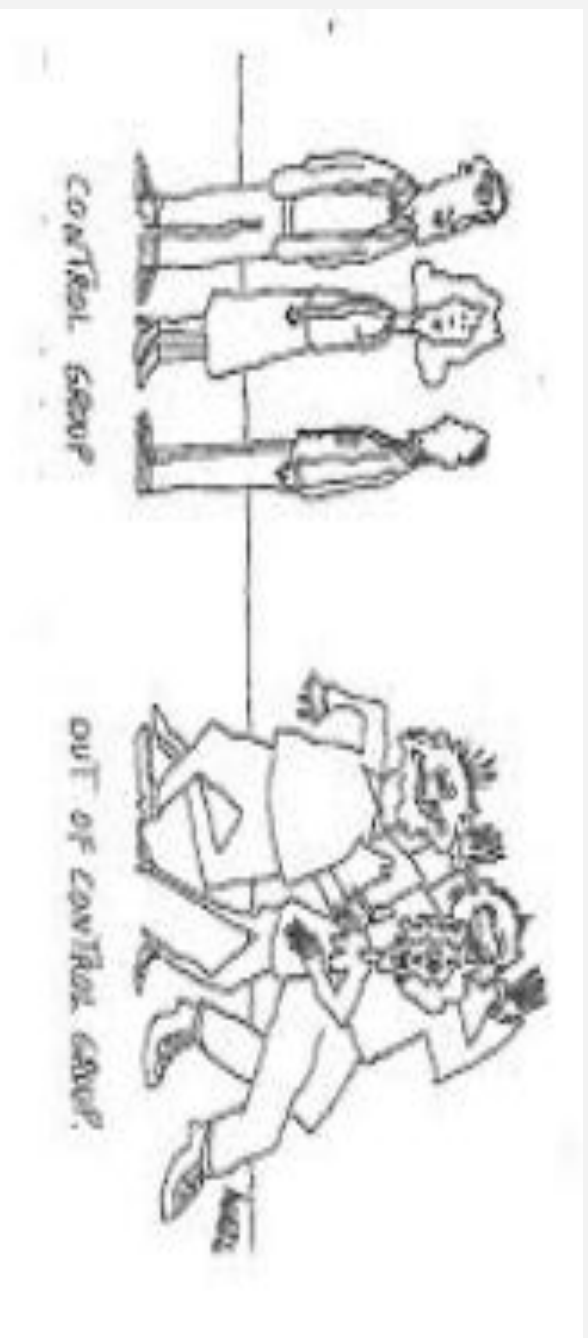
THE TEST GROUP

The Test Group were the group assigned to complete the tests with music!



THE CONTROL GROUP

The Control Group were assigned the task of completing their tests in silence.



Step 6

Make it a secret (If you can!)

Being a small school, keeping the control group from knowing the test was difficult as some of us were in the group and we knew what was happening. We did manage to keep knowing on a 'needs to know' basis and more than 50% of each team had no idea what we were doing.

TOP

SECRET

Step 7

Conduct your study

We decided to administer our tests one a week over a course of three weeks.

Week 1: Letters Test

Week 2: Pictures Test

Week 3: Animal Duplication

The Letters Test

In this test, the subjects had to view some letters for a short period of time and when they were gone from the screen, remember those they had seen. The test began with 2 letters to remember and moved on to remembering ten letters in the final round.

Here is the test we used:

<https://faculty.washington.edu/chudler/stm0.html>



The Pictures Test

Here is the picture that you saw.



How many objects did you remember?

In this test subjects had to view a set of pictures for a short period of time and remember what they had seen! Here is our test picture.

Here is the link to the test:

<http://faculty.washington.edu/chudler/puzmatch3.html>

Animal Duplication Test

For this test, the subjects had to press the space bar on their computer whenever they saw a repeated image of an animal.

Here is a link to the test we used:

<http://www.memorylosstest.com/free-short-term-memory-tests-online/>



Each group was tested away from each other and unaware of what the other group were doing!



Claghans Hill NS @ScollAnClochain · Mar 8

Testing in progress for our @hrbtmrrn clinical trial first up the test group #clinicaltrial



Claghans Hill NS @ScollAnClochain · Mar 8

Sssshhhhhh it's the control groups turn @hrbtmrrn #clinicaltrial



Step 8

Report your findings

Following each of our tests, we recorded our findings in graph form and on adding all the totals in each group we were able to determine an average score for each.

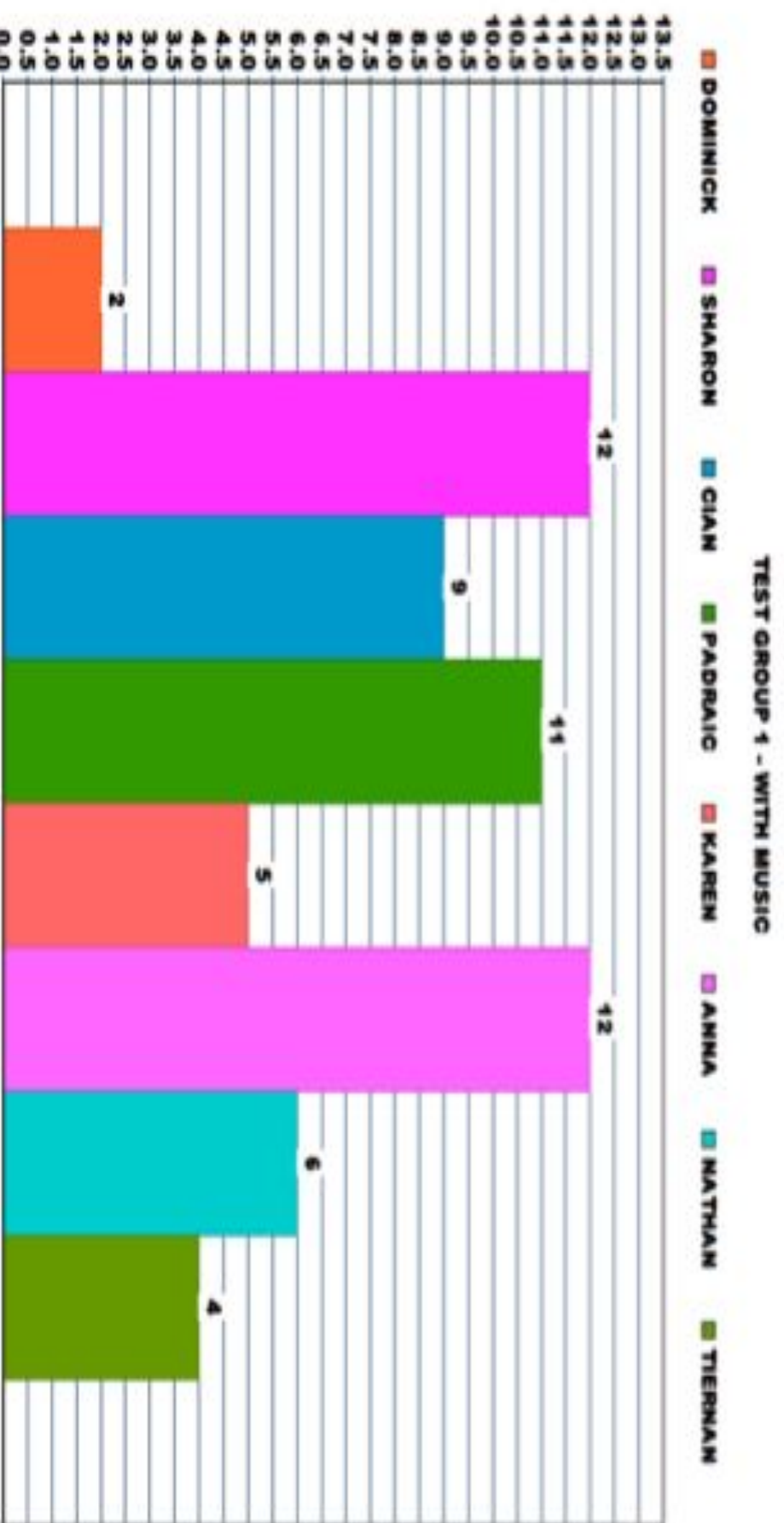


Cloghans Hill NS @ScoilAnClochain · Feb 21

Working out the results from test 2 of our @hrbtm clinical trial!



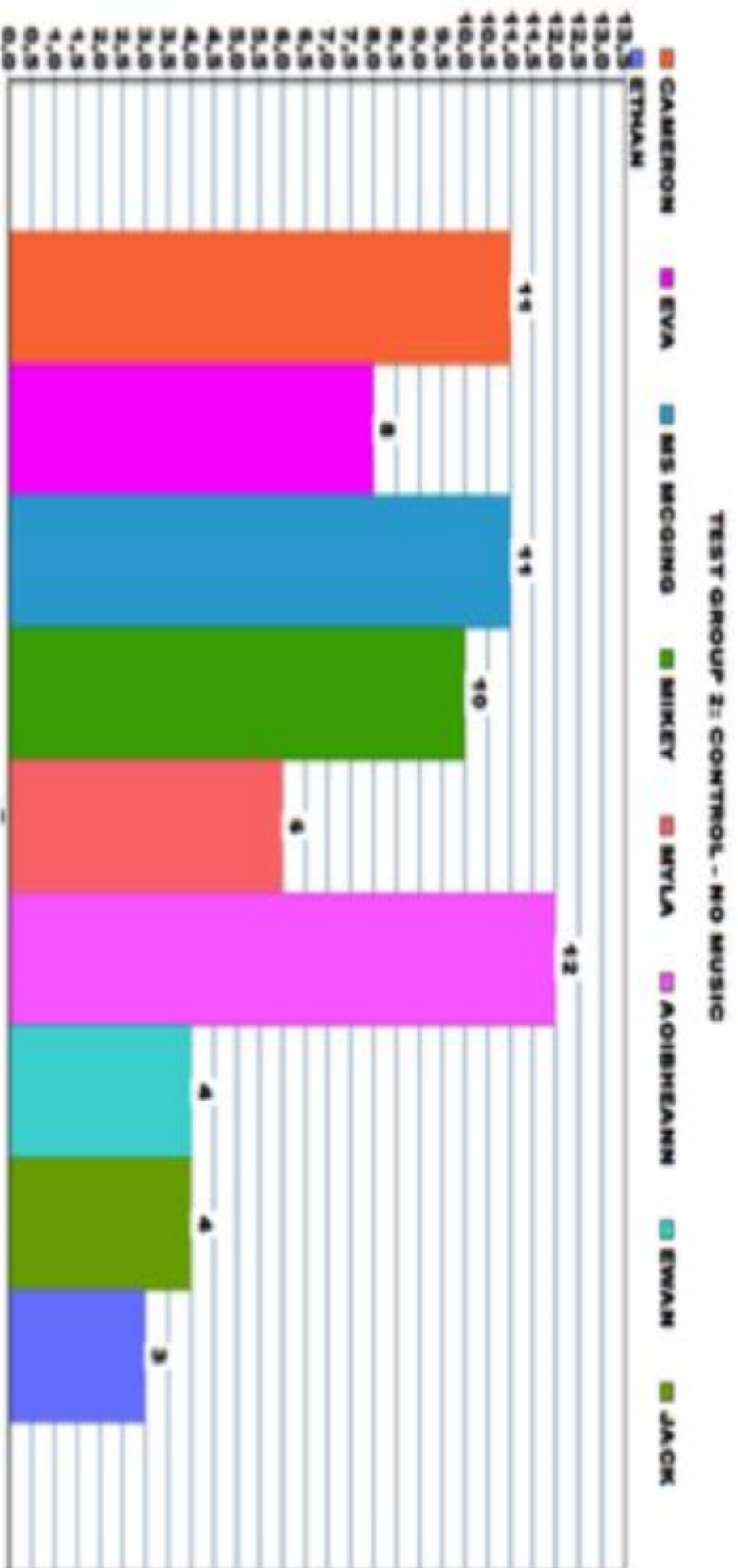
Week 1 – Short term Memory: Letters



Total Score: 61

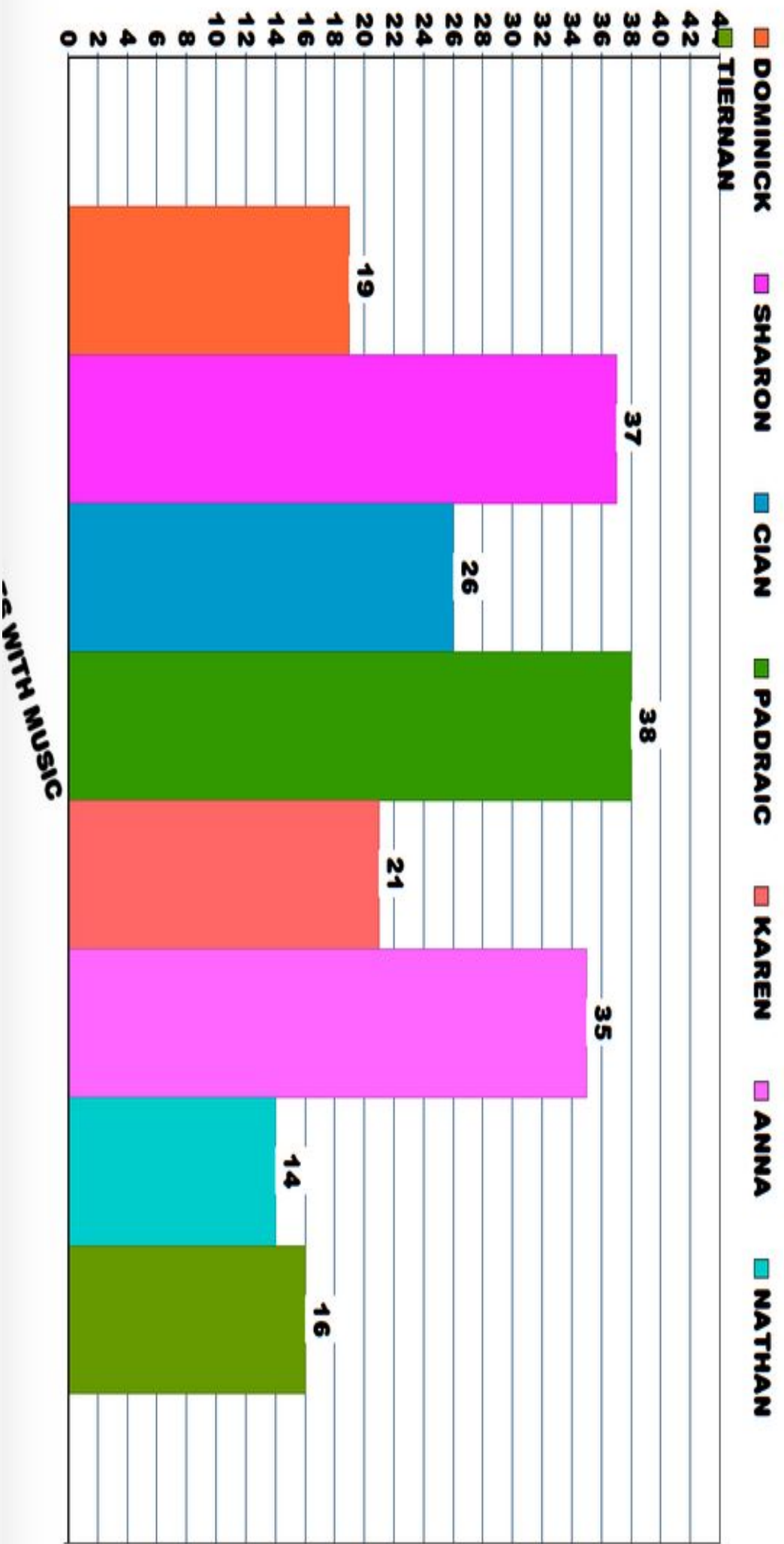
Average: 7.625

Week 1 - Short term Memory: Letters



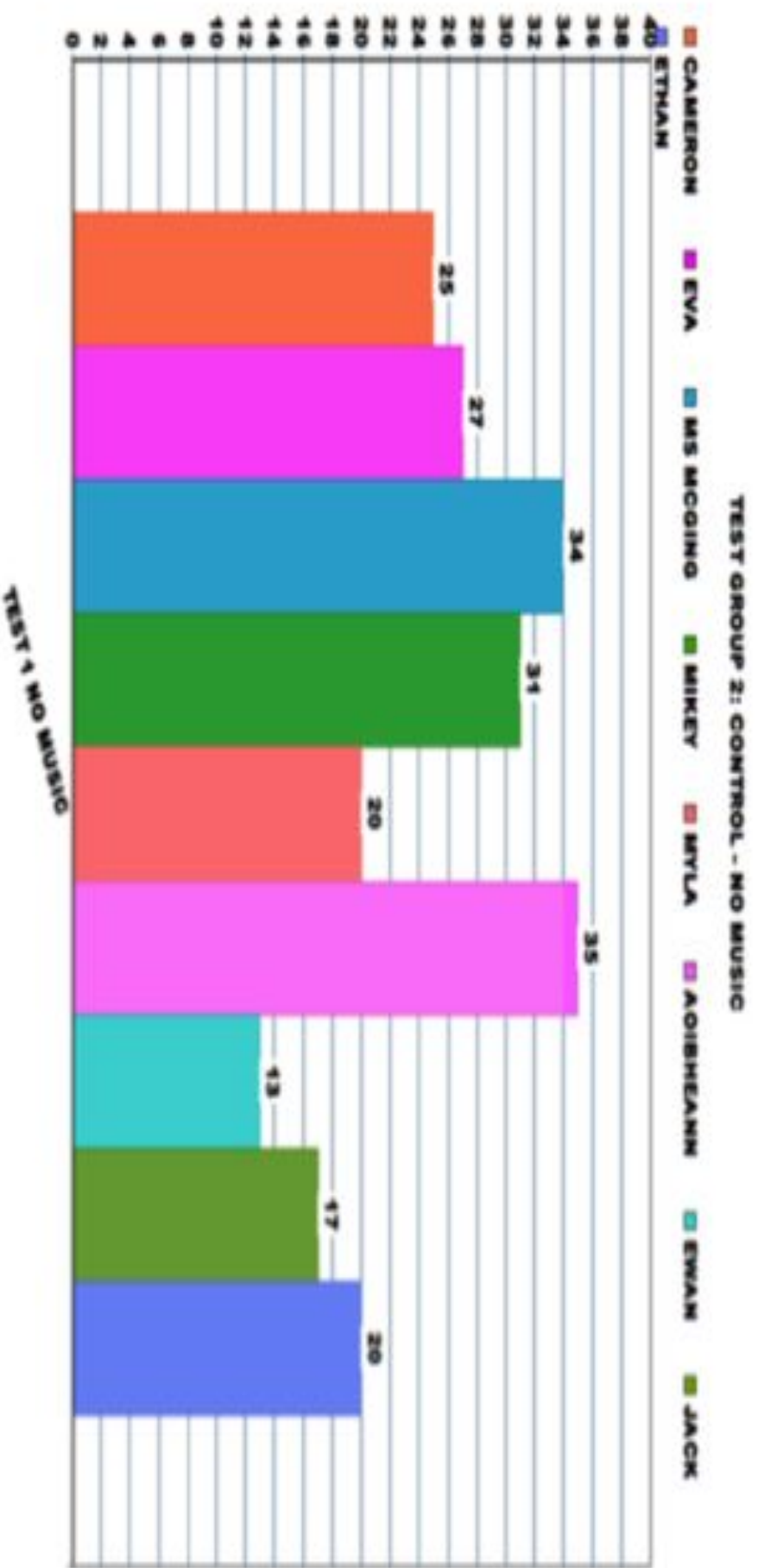
Total Scores: 69 Average: 7.6

TEST 2: GROUP 1 - WITH MUSIC



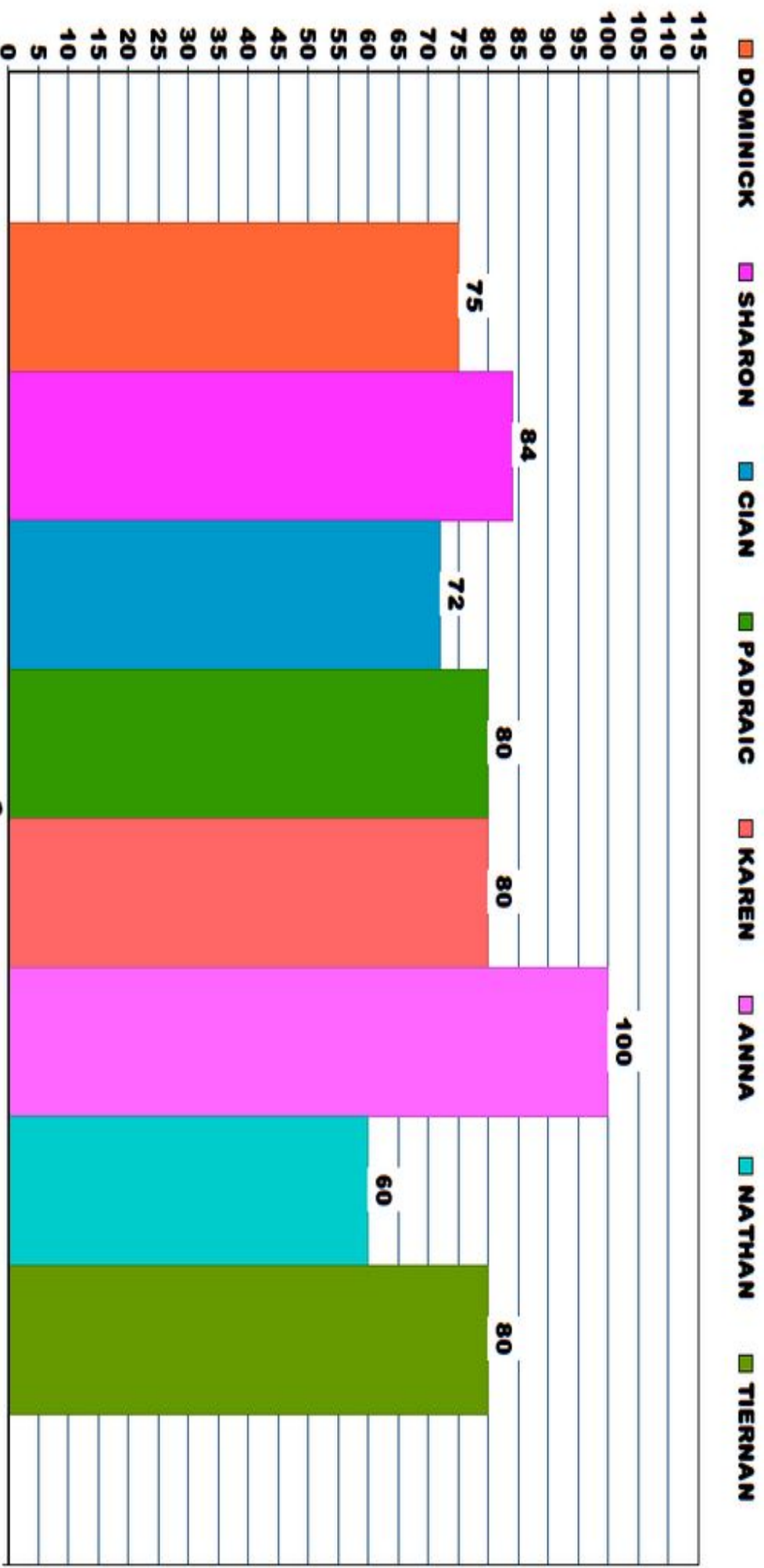
Total: 196 Average: 24.5

Week 2 – Short Term Memory: Pictures



Total Score: 222 Average: 24.66

TEST 3: GROUP 1 - WITH MUSIC

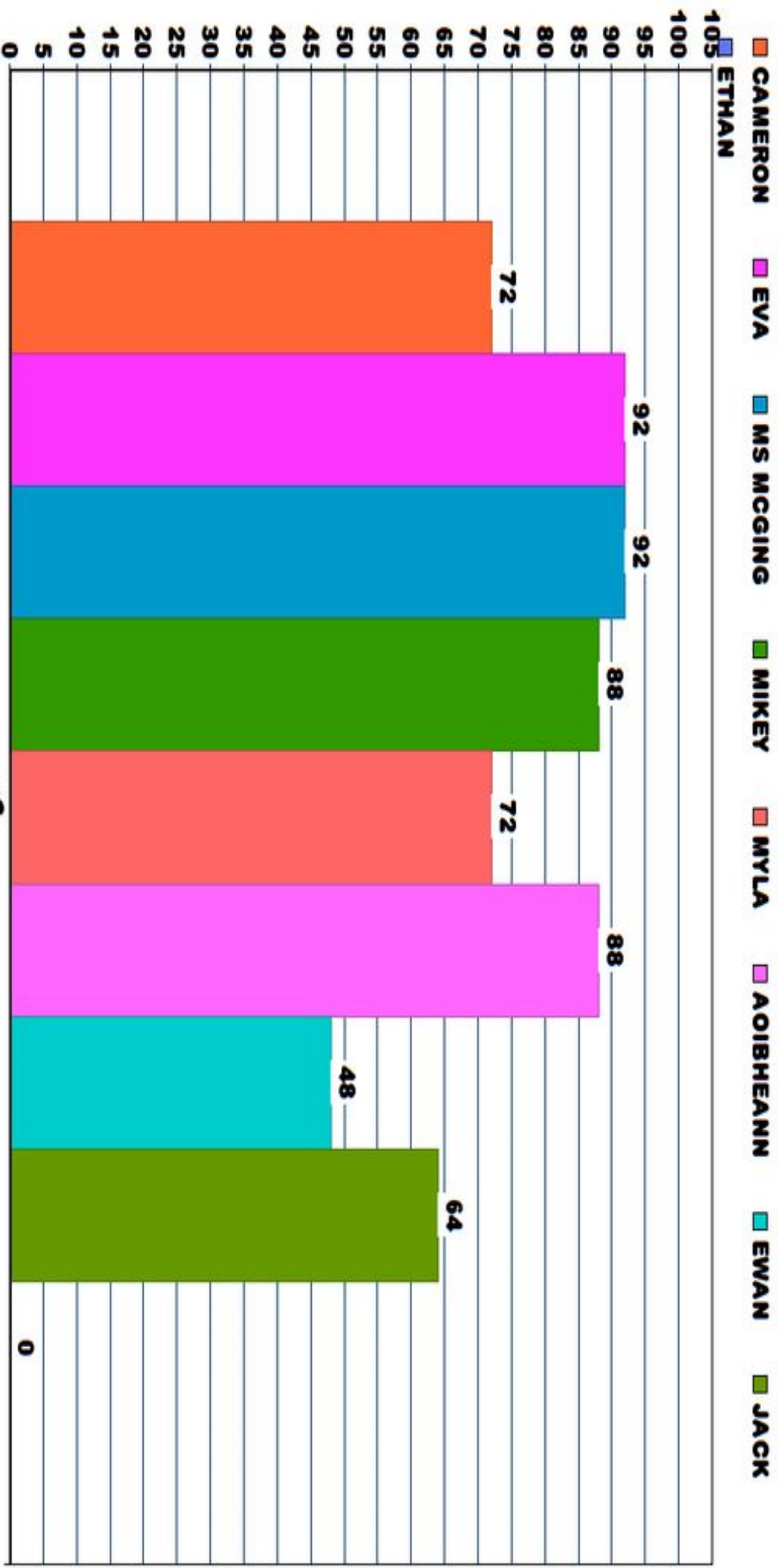


TEST 2 PICTURES NO MUSIC

Total: 631

Average 78.87%

TEST 3: GROUP 2 - NO MUSIC



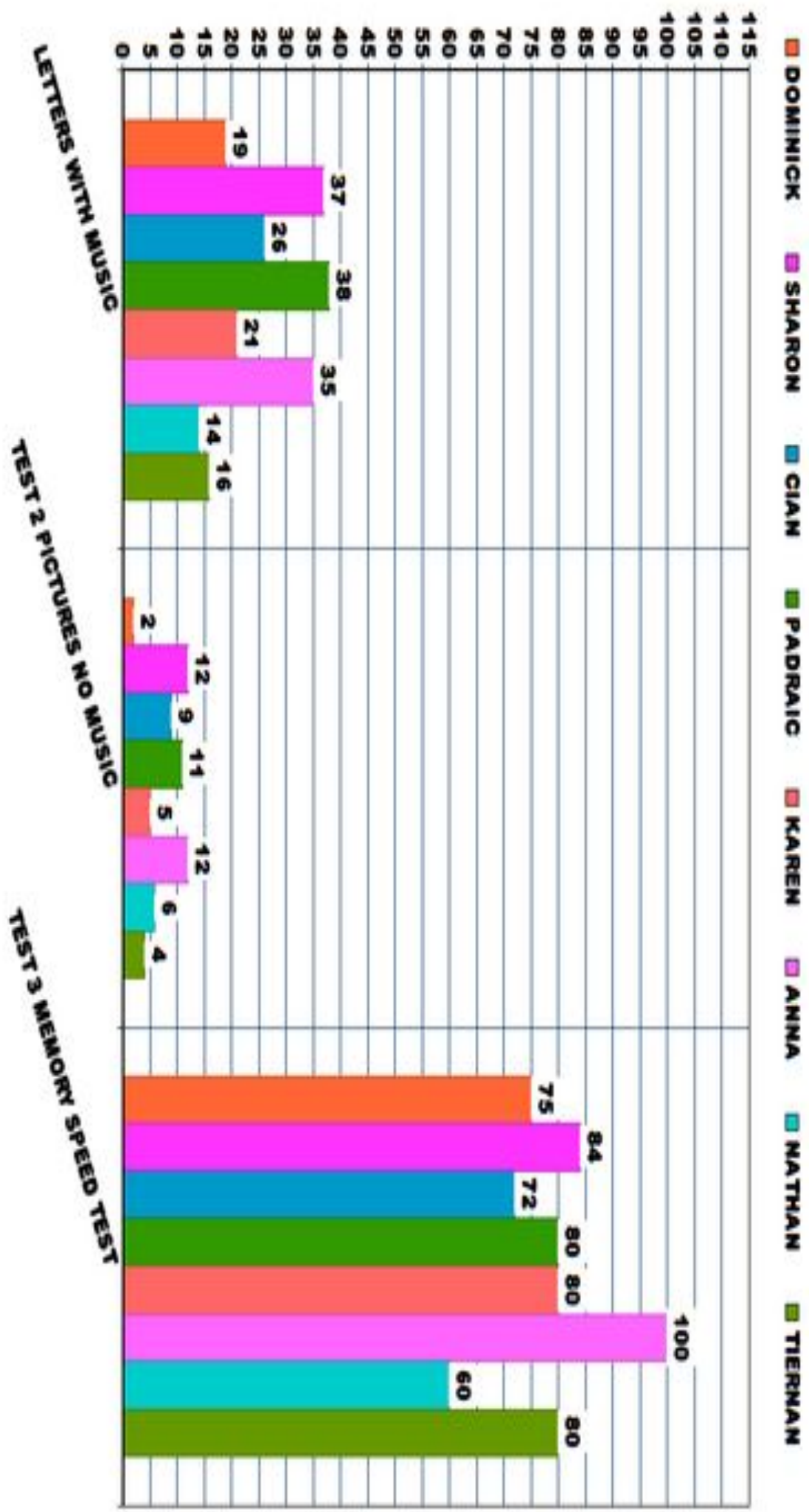
Total: 616

Average: 77%

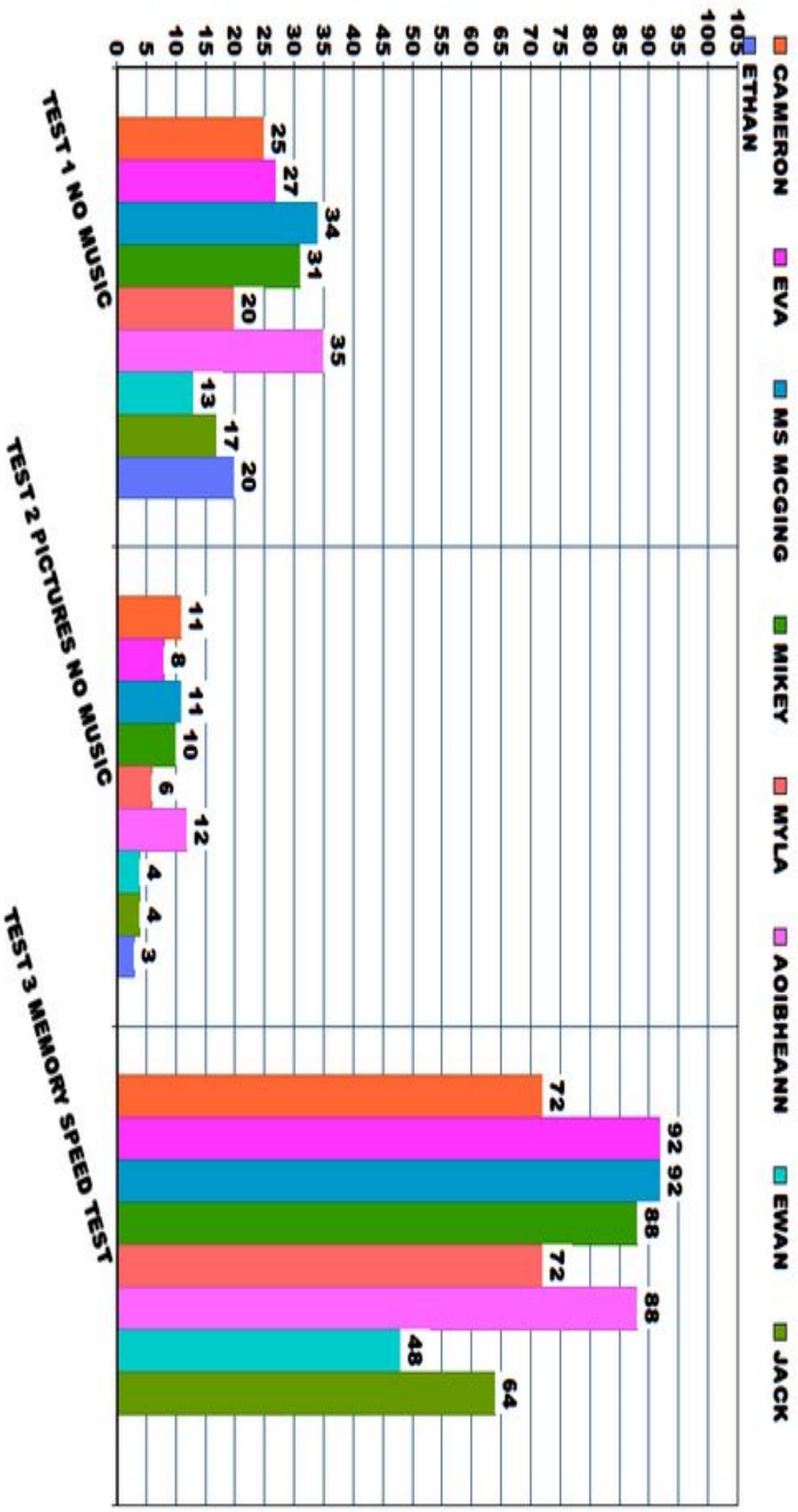
Ethan absent.

Overall Results

TEST GROUP 1 - WITH MUSIC



Overall Total: 888 Average: 111



Overall 291 in test1+2 (/9) and 616 in test 3(/8 as ethan absent)

Average: 109.2

OUR

GOALS

Our results showed us that:

In the first test, the letters test, the results were almost identical. The difference was a tiny .025.

In the second test, the pictures test, the group with music got 24.5 while without got 24.66 a small victory for the silent group.

In the final test, the animal duplication, the music group scored 78.87% while the silent group scored 77%. A narrow victory in this instance for the music group!

Overall the results were: The test group (with music) had 111 while the control group (the silent group) had 109.2.

From this we were happy to conclude that music is neither a friend or a foe to our memory. Our results were so similar and the margins so small that while the music group did in the end come out on top, it was a very close race! We are pleased that we will be able to refer to our trial when told by our parents to turn off our music while we are studying!!!

We really enjoyed taking part in and planning for our clinical trial. We loved getting a chance to understand the steps involved and the reasoning for all the different parts of hosting a trial from the test v the control group to the planning of the tests and keeping it a secret!

We had difficulty keeping our trial a secret in such a small school but we did manage to keep it from the juniors until the very end!

We loved researching the best way to examine and test ones memory and finding which tests we would administer!

Now that the test is over, we are already thinking of what else could determine an answer to our question. Could it have been a different type of music that would have yielded different results - we did use nice relaxing music which the next slide will talk about!



Minimise Distractions

Turn off your phone and the television when you are studying. Music can sometimes help with studying, but only those soft instrumentals types. You need to **focus** when you study with full concentration and effort. Set a goal for each study session so you know precisely what you are supposed to achieve at the end of every session.

Another thing we would each like to check is our very own results tested the two different ways - would our own personal results be similar to those of the groups??

Is there a difference between boys and girls?

Is there are difference age wise would music help younger people rather than older or vice versa?



**WHICH ONE
WOULD YOU
BE?**





Facts all Fakes!