

Personal Exercise Programme

Centre Name: [REDACTED]

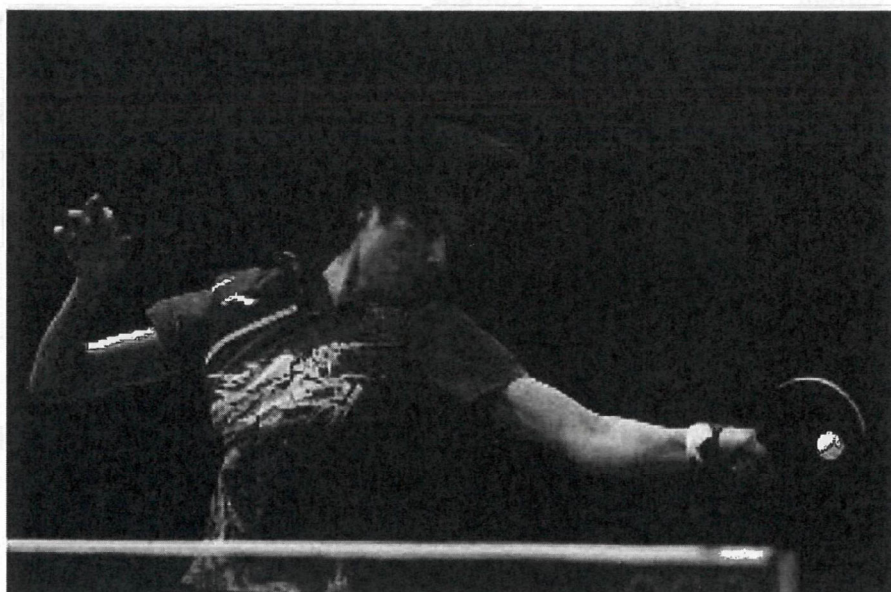
Centre Number: [REDACTED]

Candidate Name: [REDACTED]

Candidate Number: [REDACTED]

Chosen Activity/Sport: Table Tennis

Chosen Method of Training: Circuit Training



Introduction

Over the next 6 weeks my aim for my P.E.P is to improve my strength/power for table tennis (Specific). To achieve this I have put together a circuit plan mainly consisting of upper body strength and other various exercises. Before I put together my plan, I took part in some various fitness tests and when analysing the results I found that my weakest area was in the handgrip test for strength. By the end of the 6 weeks (Time bound) I aspire to have improved by 2-4 kilos (Measurable) and this should push me up to below average from poor (Realistic). My target is definitely achievable however I will need to put in a lot of work to achieve this.

Main aim- I aim to improve my strength in my arms by increasing my handgrip dynamometer score by between 2-4 kgs over the 6 week period

PARQ- please see appendix 1 for my questionnaire

Fitness tests before my P.E.P

Component	Fitness Test	Current Score	Rating	Current score out of 10	<div>This is the test I aim to improve by the end of the course. Currently I'm rated at 'poor' however I hope to achieve below average. I don't think this is a massive jump and can be achievable; this does mean I will have to put in a considerable amount of effort.</div>
Agility	Illinois Agility Run	17.63s	Average	5/10	
Speed	30m Sprint	4.5	Below Average	4/10	
Muscular strength	Grip Dynamometer	38R 38L	Poor	2/10	
Aerobic Endurance	Multistage Fitness Test	2670m	Above Average	7/10	

At the end of the course I will be retesting my muscular strength, which is the grip dynamometer test. Achieving a higher score will indicate my improvements I have made over these 6 weeks. None of the other tests need any sort of improvement as they are irrelevant.

Principles of training

Specificity Circuit training is how I intend to improve my strength/power for table tennis by doing mostly upper body exercises to increase my strength e.g. (push ups) and faster ones e.g. (clap push ups) to improve power however I will need other exercises that work my core and my quadriceps to help with balance.

Overload By pushing myself to my limit is the only way I can improve but this doesn't mean that I will need to train 5 hours a day 7 days a week because if I give my body no rest I could cause physical harm.

Progression On my workout session I will start at a good intensity but gradually build it up every week so week 2 will be less recovery and a longer period of working on each exercise.

Frequency I will be training for 6 weeks with 2 workouts each week.

Intensity When I train I will be pushing myself very hard as this will effectively show results and my improvements when I come to retake my tests are the P.E.P. By working for longer, this increases the intensity.

Time Every week I plan to increase the time I work for and decrease my resting period, as this increases intensity.

Type The most effective method of training for me is circuit training as it will improve the power/strength in all parts of my body but focusing mainly on the upper body e.g. push ups and pull ups.

Smart Targets

Specific After the course I hope to have gained a bit more strength/power as this will positively affect me by being able to generate more spin when playing forehand and backhand loops as well as the overall drive.

Measurable Physically, I will not be able to indicate whether I have gained strength/power over the past 6 weeks so I will retake the hand grip dynamometer test and if my results are a bit higher, this will tell me if I have progressed.

Attainable I believe that my goal is certainly well within my capacity as I aim to improve my strength from poor to under average. Needless to say this means I will have to put the effort in to see the output.

Realistic The goal I have set is certainly within my reach as long as I am willing to commit. I haven't tried to increase my strength too much as this would mean I would have to put in a huge amount of work; more than I'm doing already and it wouldn't be a realistic goal.

Time Bound My goal is set over a 6 week period with 2 lessons a week. There is no reason why I shouldn't keep to this but if I'm absent for a session behind I can always put in an extra session one week.

When setting these goals I must act upon these goals and commit to each and every one of them otherwise I won't see improvement and no improvements will be acknowledged by the end of my course.

Carrying out and monitoring my PEP

Please see appendix 2 for my training sessions, 3 for my circuit details and 4 for my weekly evaluations

Evaluation

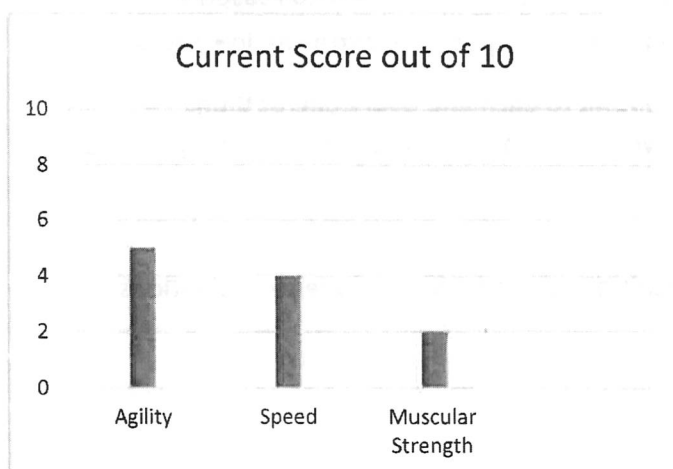
My test results before:

Component	Fitness Test	Current Score	Rating	Current score out of 10
Agility	Illinois Agility Run	17.63s	Average	5/10
Speed	30m Sprint	4.5	Below Average	4/10
Muscular strength	Grip Dynamometer	38R 38L	Poor	2/10

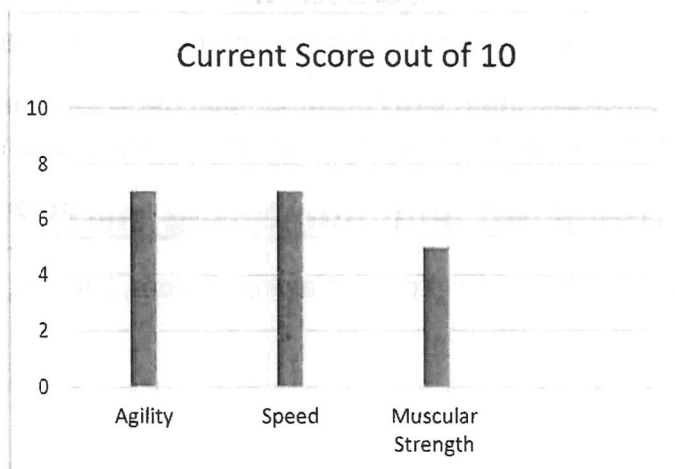
My test results after:

Component	Fitness Test	Current Score	Rating	Current score out of 10
Agility	Illinois Agility Run	16.33s	Above Average	7/10
Speed	30m Sprint	4.18	Above average	7/10
Muscular strength	Grip Dynamometer	45R 46L	Average	5/10

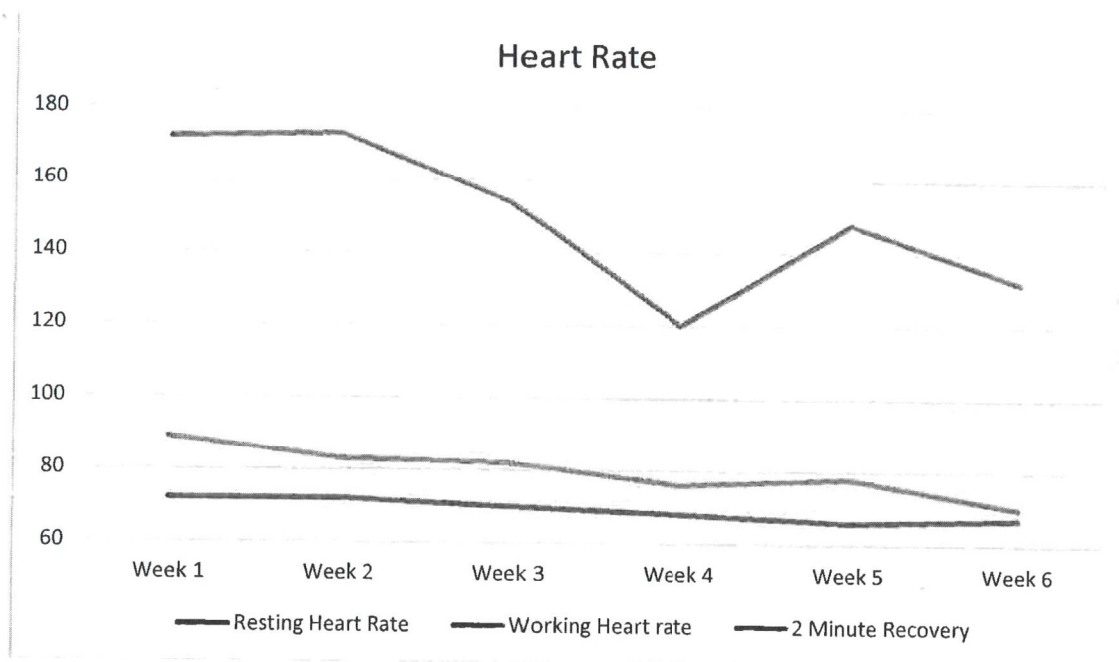
Before my P.E.P



After my P.E.P



Before my P.E.P I was averaging 3.6/10 for agility, speed and muscular strength; this would probably be considered an overall poor. However, after my P.E.P I was achieving an average of 6.3 which has almost doubled in just 6 weeks and now this would be considered above average. This is definitely much better than I expected and this has been down to hard work and dedication; keeping to all my SMART and FITT targets. I heavily improved in the grip Dynamometer as I started at poor and now I have brought it up to average from 38 to 45 in my dominant right hand.



This graph indicates my heart rate in general is decreasing. As I am working at the same intensity this means I am becoming fitter as I don't get as tired after each session and I can lower my heart rate much quicker. I am producing more oxygen and recovering quicker as each week goes by. This is shown in my 2 minute recovery because as each week goes by, it begins to get closer and closer to my working heart rate.

SMART target evaluation

I would like to think that I have completed all my smart targets after my P.E.P as I have improved in the Grip Dynamometer Test which I can now use to generate more power in table tennis and using that to create more spin.

I received an accurate set of results which indicate a huge improvement from the start to the end of the course.

My goal was definitely achievable, I wanted to improve enough to achieve a few kilograms more in the Hand Grip Dynamometer and I managed to do that.

The goal I set was reasonable, I wanted to achieve a slightly higher result, which I exceeded due to my hard work.

I always kept to my time keeping and this is why I achieved as well as I did.

Overall, circuit training has definitely helped me as I can now apply more power to table tennis. Before my P.E.P, my coach said I was lacking in power in my shots. After the 6 weeks he commented how much stronger I have become.

Future recommendations

In order to be able to keep gaining power I will carry on with circuit training and gradually keep bringing the intensity up. If I keep doing this I can continue to be an even better table tennis player as I can generate more spin with power. If I was to complete the PEP again, I would change about the activity stations on my circuit to add more variety to my programme to help with my motivation. I would also add music to aid my motivation levels as well. If I continue in this way, I would like to be able to achieve the excellent rating for my power.

Appendix

(1) Questionnaire

Physical Activity Readiness Questionnaire

NAME [REDACTED]

Date of Birth [REDACTED]

Any information contained herein will be treated as confidential:

	Yes	No
Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?		✓
Do you feel pain in your chest when you do physical activity?		✓
In the past month, have you had chest pain when you were not doing physical activity?		✓
Do you lose your balance because of dizziness or do you ever lose consciousness?		✓
Do you have a bone or joint problem that could be made worse by a change in your physical activity?		✓
Is your doctor currently prescribing drugs for your blood pressure or heart condition?		✓
Do you know of any other reasons why you should not undergo physical activity? This might include severe asthma, diabetes, a recent sports injury, or serious illness.		✓
Have you any blood disorders or infectious diseases that may prevent you from providing blood for experimental procedures?		✓

If you have answered **NO** to all questions then you can be reasonably sure that you can take part in physical activity.

I declare that the above information is correct at the time of completing this questionnaire

Date 06/11/2017

(2) Training sessions and circuit details

X	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST
Week 2	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST
Week 3	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST
Week 4	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST
Week 5	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST
Week 6	REST	Circuit Training (30s per station) + Table tennis 2hrs	Table tennis 2hrs	Circuit training + table tennis 2:30 hrs	Table tennis 3 hrs	Table tennis 2-4 hrs	REST

Session details: Circuit training

Firstly I need to take my starting heart rate (beats per min)
 Warm up - Run outside for a 3-5 minutes to get my heart rate going then inside do a few upper body and lower body dynamic stretches. The warm up should take 15 minutes into the lesson then the main session takes place for 30 minutes and then a 5 minute cool down takes place.

Main Exercises

Rope climbing- Great for power as I am climbing up the ropes fast.

Mountain climbers- Improves the power in my legs; great for pushing of my legs to get to the ball in table tennis.

Step ups- Improves the power in my legs; great for pushing of my legs to get to the ball in table tennis.

Burpees – Improves power in arms and legs.

Star jumps – Power in legs.

Back plank – Works the abdominals; great for balance.

Rocket jumps- Improves power in legs.

Push ups - Great for improving strength in biceps.

Wall squat- Great for improving strength in the legs.

After each exercise a 30 second rest is needed. Progression will result in a shorter rest over the 6 week period and longer work rate.

3x Repetitions

(3) Circuit details

X	Repetition 1	Repetition 2	Repetition 3
W1 S1	Push ups: 17 Rocket jumps: 15 Back plank: for 30s Step ups: for 30s Mountain climbers: 62 Tricep dips: 12 Wall squat: for 30s Burpees: 11 Rest between exercises: 30s	Push ups: 12 Rocket jumps: 17 Back plank: for 30s Step ups: for 30s Mountain climbers: 61 Tricep dips: 9 Wall squat: for 30s Burpees: 10	Push ups: 8 Rocket jumps: 13 Back plank: for 30s Step ups: for 30s Mountain climbers: 68 Tricep dips: 14 Wall squat: for 30s Burpees: 10 RHR:72 WHR:172 2min recovery:89
W1 S2	Push ups: 20 Rocket jumps: 16 Back plank: for 30s Step ups: for 30s Mountain climbers: 63 Tricep dips: 18 Wall squat: for 30s Burpees: 13 Rest between exercises: 30s	Push ups: 16 Rocket jumps: 13 Back plank: for 30s Step ups: for 30s Mountain climbers: 70 Tricep dips: 14 Wall squat: for 30s Burpees: 14	Push ups: 12 Rocket jumps: 12 Back plank: for 30s Step ups: for 30s Mountain climbers: 62 Tricep dips: 14 Wall squat: for 30s Burpees: 12 RHR: 71 WHR:184 2min recovery:87
W2 S1	Push ups: 21 Rocket jumps: 17 Back plank: for 35s Step ups: for 35s Mountain climbers: 74 Tricep dips: 18 Wall squat: for 35s Burpees: 17 Rest between circuits: 25s	Push ups: 16 Rocket jumps: 19 Back plank: for 35s Step ups: for 35s Mountain climbers: 61 Tricep dips: 16 Wall squat: for 35s Burpees: 13	Push ups: 7 Rocket jumps: 18 Back plank: for 35s Step ups: for 35s Mountain climbers: 65 Tricep dips: 19 Wall squat: for 35s Burpees: 12 RHR: 72 WHR:173 2min recovery:83
W2 S2	Push ups: 23 Rocket jumps: 19 Back plank: for 35s Step ups: for 35s Mountain climbers: 70 Tricep dips: 18 Wall squat: for 35s Burpees: 17 RHR: 64	Push ups: 18 Rocket jumps: 19 Back plank: for 35s Step ups: for 35s Mountain climbers: 74 Tricep dips: 16 Wall squat: for 35s Burpees: 16 WHR:160-170 WHR 160-170	Push ups: 20 Rocket jumps: 16 Back plank: for 35s Step ups: for 35s Mountain climbers: 68 Tricep dips: 21 Wall squat: for 35s Burpees: 12 2min recovery:84

W3 S1	Push ups: 23 Rocket jumps: 16 Back plank: for 37s Step ups: for 37s Mountain climbers: 71 Tricep dips: 25 Wall squat: for 37s Burpees: Diamond push up: 8 Rest between circuits: 23s	Push ups: 19 Rocket jumps: 14 Back plank: for 37s Step ups: for 37s Mountain climbers: 73 Tricep dips: 23 Wall squat: for 37s Burpees: 17 Diamond push up: 10	Push ups: 23 Rocket jumps: 12 Back plank: for 37s Step ups: for 37s Mountain climbers: 76 Tricep dips: 19 Wall squat: for 37s Burpees: 15 Diamond push up: 7 RHR:70 WHR:154 2min recovery:82
W3 S2	Push ups: 24 Rocket jumps: 17 Back plank: for 37s Step ups: for 37s Mountain climbers: 75 Tricep dips: 19 Wall squat: for 37s Burpees: 16 Diamond push up: 7	Push ups: 22 Rocket jumps: 16 Back plank: for 37s Step ups: for 37s Mountain climbers: 72 Tricep dips: 17 Wall squat: for 37s Burpees: 18 Diamond push up: 9	Push ups: 19 Rocket jumps: 16 Back plank: for 37s Step ups: for 37s Mountain climbers: 60 Tricep dips: 23 Wall squat: for 37s Burpees: 17 Diamond push up: 8 RHR:70 WHR:154 2min recovery:82
W4 S1	Push ups: 25 Rocket jumps: 19 Back plank: for 39s Step ups: for 39s Mountain climbers: 82 Tricep dips: 21 Wall squat: for 39s Burpees: 18 Diamond push up: 12 Rest between circuits: 21s	Push ups: 26 Rocket jumps: 17 Back plank: for 39s Step ups: for 39s Mountain climbers: 81 Tricep dips: 23 Wall squat: for 39s Burpees: 16 Diamond push up: 7	Push ups: 22 Rocket jumps: 18 Back plank: for 37s Step ups: for 37s Mountain climbers: 79 Tricep dips: 21 Wall squat: for 39s Burpees: 18 Diamond push up: 8 RHR:68 WHR:120 2min recovery:76
W4 S2	Push ups: 28 Rocket jumps: 20 Back plank: for 39s Step ups: for 39s Mountain climbers: 76 Tricep dips: 23 Wall squat: for 39s Burpees: 19 Diamond push up: 11	Push ups: 22 Rocket jumps: 21 Back plank: for 39s Step ups: for 39s Mountain climbers: 72 Tricep dips: 21 Wall squat: for 39s Burpees: 19 Diamond push up: 12	Push ups: 18 Rocket jumps: 20 Back plank: for 39s Step ups: for 39s Mountain climbers: 73 Tricep dips: 14 Wall squat: for 39s Burpees: 15 Diamond push up: 9 RHR:68 WHR:160 2min recovery:79
W5 S1	Push ups: 27 Rocket jumps: 23 Back plank: for 41s Step ups: for 41s Mountain climbers: 84 Tricep dips: 26	Push ups: 30 Rocket jumps: 20 Back plank: for 41s Step ups: for 41s Mountain climbers: 76 Tricep dips: 21	Push ups: 26 Rocket jumps: 21 Back plank: for 41s Step ups: for 41s Mountain climbers: 81 Tricep dips: 28

	Wall squat: for 41s Burpees: 22 Diamond push up: 14 Pull ups: 15 Rest between circuits: 19s	Wall squat: for 41s Burpees: 17 Diamond push up: 10 Pull ups: 14	Wall squat: for 41s Burpees: 22 Diamond push up: 12 Pull ups: 12 RHR:66 WHR:148 2min recovery:78
W5 S2	Push ups: 30 Rocket jumps: 21 Back plank: for 41s Step ups: for 41s Mountain climbers: 82 Tricep dips: 27 Wall squat: for 41s Burpees: 22 Diamond push up: 13 Pull ups: 11	Push ups: 26 Rocket jumps: 26 Back plank: for 41 Step ups: for 41s Mountain climbers: 85 Tricep dips: 23 Wall squat: for 41s Burpees: 19 Diamond push up: 13 Pull ups: 15	Push ups: 26 Rocket jumps: 21 Back plank: for 41s Step ups: for 41s Mountain climbers: 79 Tricep dips: 24 Wall squat: for 41s Burpees: 24 Diamond push up: 11 Pull ups: 13 RHR:67 WHR:176 2min recovery:80
W6 S1	Push ups: 33 Rocket jumps: 27 Back plank: for 43s Step ups: for 43s Mountain climbers: 86 Tricep dips: 30 Wall squat: for 43s Burpees: 24 Diamond push up: 16 Pull ups: 17 Rest between circuits: 17s	Push ups: 31 Rocket jumps: 26 Back plank: for 43s Step ups: for 43s Mountain climbers: 86 Tricep dips: 26 Wall squat: for 43s Burpees: 26 Diamond push up: 15 Pull ups: 14	Push ups: 33 Rocket jumps: 27 Back plank: for 43s Step ups: for 43s Mountain climbers: 86 Tricep dips: 30 Wall squat: for 43s Burpees: 24 Diamond push up: 16 Pull ups: 16 RHR:67 WHR:132 2min recovery:70
W6 S2	Push ups: 34 Rocket jumps: 28 Back plank: for 43s Step ups: for 43s Mountain climbers: 84 Tricep dips: 32 Wall squat: for 43s Burpees: 22 Diamond push up: 15 Pull ups: 18	Push ups: 35 Rocket jumps: 27 Back plank: for 43s Step ups: for 43s Mountain climbers: 89 Tricep dips: 32 Wall squat: for 43s Burpees: 24 Diamond push up: 16 Pull ups: 17	Push ups: 29 Rocket jumps: 13 Back plank: for 43s Step ups: for 43s Mountain climbers: 86 Tricep dips: 29 Wall squat: for 43s Burpees: 28 Pull ups: 19 RHR:66 WHR:170 2min recovery:69

(4) Weekly evaluations

Week 1

On the 1st week I felt pretty confident with my workout, I could feel after each session that I was improving because each session my arms and legs had been worked hard. On my second session my heart rate had gone down by one (most likely no change) but I had worked much harder on this session and by the end of the circuits my heart rate beating faster; due to me working harder but after my 2 minute recovery that was even lower on my first one, this showed me I had definitely improved.

Week 2

Since I felt so confident on the first week, I thought I would take a bit of a jump and increase the intensity by adding 5s to each exercise and decreasing the rest by 5s. This would definitely work me harder and I can see this as most of my exercises have improved in frequency. This is as I have increased by 4 push ups on W2 S1 than on W1 S1.

Week 3

This week I have increased my time working by 2s and decreased my rest by 2s. This means I am now working at an intensity which is much higher which means I am still continuing to improve. As my main focus is to improve the power and strength in my arms I have added in an extra exercise designed for that purpose, the diamond push up. Rather than working just my biceps with normal push ups. I have now added in this exercise to improve my triceps. Overall this will strength my arms considerably.

Week 4

This week I found was by far hardest as I had a few pains in my shoulder which meant I had showed signs of improvement but it also meant I had to take the exercises a bit easier as I didn't want progressive overload. I have decided to consistently increase my time working by 2s and decreasing time resting by 2s. Overall I think I have made massive improvements over the course so far; my mountain climbers, compared to W1 I have when I had achieved 61 now at week 4 I am achieving 81, this shows how much I am improving and keeping a high level of intensity.

Week 5

As I have been doing so well so far, I decided to add in pull ups. This will further increase my strength, ergo when I come to retest, I should have a better result at the hand dynamo grip test. My results this week have been going great and I have further increased my time working by 2s. So far it has increased 11s since the start of the course; I wouldn't have been able to do this when I first started, this shows how much I have come on in little time.

Week 6

Finally on the last week, I increased my time working by 2s and decreased my resting by 2s. I felt I had really come on since the start of the 6 weeks and can see I have made huge achievements in everything I had done. In just 3 weeks I had an average of 8 diamond push ups then in just 3 weeks I had doubled my results to 16 which was a massive improvement. Now I will be retesting my results and hopefully I will have improved.