




**PHYSICAL
FITNESS TEST**


INTRODUCTION:

- A review of the existing Physical Fitness Tests (PFT) introduced by Dr. Aparicio H. Mequi, former Chair, Philippine Sports Commission (PSC) and Director, Bureau of Physical Education and School Sports (BPES) was conducted for the purpose of establishing testing protocols considered to be more current and appropriate for the Special Program in Sports (SPS) and in the new K to 12 program.
 - The development of the physical fitness tests was conducted through a workshop initiated by the Task Force on School Sports (TFSS) and was subsequently reviewed by the Bureau of Secondary Education (BSE). This gave rise to the Physical Fitness Tests Manual. The manual is intended for the use of the public and private schools for the Physical Education and School Sports Program.
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- Passing the prescribed standards in the Physical Fitness Tests is a requirement for admission into the Special Program in Sports. Moreover, under the K to 12 Basic Education Curriculum, Physical Fitness is one of the major goals of the Physical Education Program and shall be incorporated/adopted in the PE curriculum from Grades 4 to 10.
- The PFT is a set of measures designed to determine a student's level of physical fitness. It is intended to test two categories of physical fitness commonly referred to as: *Health-Related and Skill-Related*.
- *Health-related* component refer to those physical attributes which enable a person to cope with the requirements of daily living such as cardio-vascular endurance or stamina, muscular strength and endurance, flexibility and the appropriate body mass index (BMI). *Skill-related* components are physical abilities that show potential for good performance in certain skills (usually in sports) like running speed, agility, reaction time or quickness, balance and coordination.

- In determining the level of health-related and skill-related physical fitness status, several test items are applied. These tests were specifically selected to suit various conditions existing in schools such as a) the time it takes for a test to be completed, b) availability of equipment and facilities, c) ease and simplicity in administering the test, d) easy recording of the tests results, and e) challenging yet joyful participation among the pupils and everyone involved in the program.
- The administration and implementation of the testing program shall be treated as an essential component of the Physical Education and School Sports Program for both elementary (Grades 4, 5 and 6) and secondary levels.

PHYSICAL FITNESS TEST OBJECTIVES:

- 1. To determine the level of fitness of students.**
 - 2. To identify strength and weaknesses for development and improvement.**
 - 3. To provide baseline data for selection of physical activities for enhancement of health and skill performance.**
 - 4. To gather data for the development of norms and standards.**
 - 5. To motivate, guide and counsel pupils/students in selecting sports for recreation, competition and lifetime participation.**
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TEST PROTOCOL

- Explain the purpose and benefits that can be derived from the physical fitness tests.
- Administer the tests at the beginning of the school year and on a quarterly basis, thereafter, to monitor improvement.
- Prepare the following testing paraphernalia:
 1. First Aid Kit
 2. Drinking Water (and a small towel or bimpopo to wipe their perspiration)
 3. Individual score cards.
 4. During testing:
 - a. Body Composition – tape measure, bathroom scale, L- square
 - b. Flexibility – ruler, tape measure
 - c. Cardiovascular Endurance – stop watch, step box/stairs
(Elem – 8”, Sec. – 12”), drum
 - d. Muscular Strength – exercise mat

TEST PROTOCOL

- e. Speed – stop watch
- f. Power – meter stick/tape measure, basketball ball (size 6 for elementary & size 7 for secondary)
- g. Agility – tape measure, masking tape/chalk, stop watch
- h. Reaction Time – plastic ruler (24 inches), table or arm chair
- i. Coordination – sipa (washer with straw)/20pcs bundled rubber bands/any similar local materials
- j. Balance – stop watch
- Observe the following prior to actual day of testing:
 - a. The testing stations should be safe and free from obstructions.
 - b. The same equipment and testing stations should be used in the start-of-the-year testing and subsequent quarterly testing.
 - c. With the guidance of the teacher, allow students to go through the various tests with minimal effort exerted to familiarize themselves with testing procedures.

TEST PROTOCOL

- d. The tests requiring cardio-vascular endurance and those other tests which involve the same muscle groups should not be taken in succession.

See suggested sequence of administering the tests.

DAY 1	DAY 2	DAY 3
<ul style="list-style-type: none">• BMI• 3 minute step test	<ul style="list-style-type: none">• Basic Plank• 40 meter sprint• Push Up• Stick Drop Test• Sit and Reach	<ul style="list-style-type: none">• Hexagon Agility Test• Juggling• Standing Long Jump• Stork Balance• Zipper Test

- Let student record and keep the result of his own performance in the score card. The school may include the results of the results of the tests in the school's Enhanced Basic Education Information System (EBEIS)/Learner's Information System (LIS)/ Educational Management Information System (EMIS).
- The students shall be grouped together and in pairs (buddy system).
- Students should wear appropriate clothing: t-shirt, jogging pants and rubber shoes, or any suitable sports attire. However when taking the BMI test, it is recommended that the students wear shorts. Wearing different clothing in all the testing sessions for BMI could affect the results.
- Conduct warm-up and stretching exercises before the tests except for the 3-Minute Step Test.
- Administer the tests in a challenging, encouraging and fun-filled environment.



**PART I:
HEALTH-RELATED FITNESS**

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BODY COMPOSITION – is the body's relative amount of fat to fat-free mass.

- **FORMULA: BODY MASS INDEX (BMI)**

$$\text{BMI} = \frac{\text{Weight (in Kilograms)}}{\text{Height (in Meters)}^2}$$

Example: $\frac{30 \text{ kg.}}{1.20\text{M}^2} = \frac{30}{1.44} = 20.83$ (Normal)

Classification:

below 18.4	- Underweight
18.5 – 24.9	- Normal
25.0 – 29.9	- Overweight
30.0 – above	- Obese

1. Weight (Body Mass)

- The heaviness or lightness of a person. (In combination with stature (height) is used to determine body mass index that indicates whether one is of normal weight, overweight or obese.)



- **Equipment:** Weighing or Bathroom scale
- **Procedure:**

For the Performer:

- a. Wear light clothing before weighing.
- b. On bare feet, stand erect, and still with weight evenly distributed on the center on the scale.

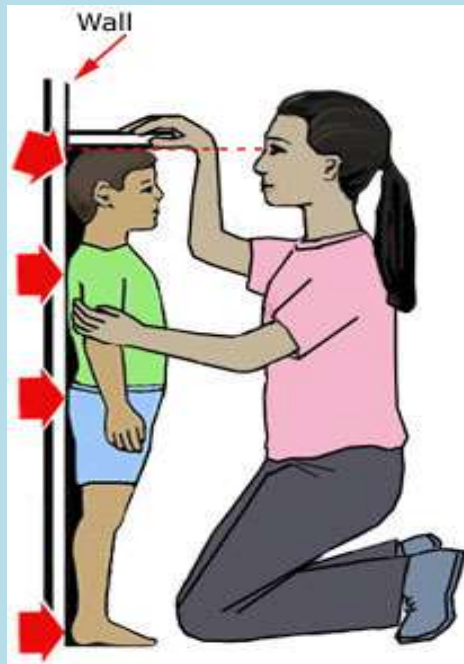
For the Partner:

- a. Before the start of weighing, adjust the scale to zero point.
- b. Record the score in kilograms.

- **SCORING:** record body mass to the nearest 0.5 kilograms.

2. Height (Stature)

- is the distance between the feet on the floor to the top (vertex) of the head in standing position.
- **Equipment:** Tape measure laid flat to a concrete wall. The zero point starts at the bottom of the floor; L-square and an even and firm floor and flat wall.



- **Procedure:**

- For the Test Performer:**

- a. Stand erect on bare feet with heels, buttocks and shoulders pressed against the wall where the tape measure is attached.

- For the Partner:**

- a. Place the L-square against the wall with the base at the top of the head of the person being tested. Make sure that the L-square when placed on the head of the student is straight and parallel to the floor.

- b. Record the score in meters.

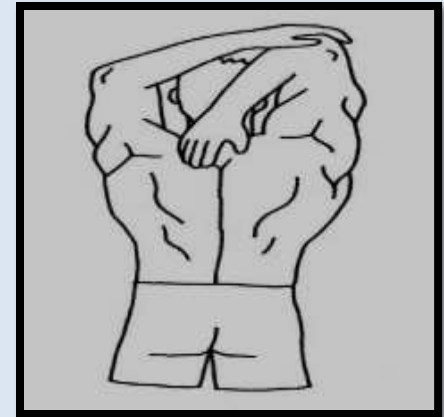
- **Scoring** – record standing height to the nearest 0.1 centimeters. (***) 1meter = 100 centimeter)

Flexibility – is the ability of the joints and muscles to move through its full range of motion.

Zipper Test

Purpose – to test the flexibility of the shoulder girdle.

- **Equipment:** Ruler
- **Procedure**
- **For the Performer:**
 - a. Stand erect.
 - b. Raise your right arm, bend your elbow, and reach down across your back as far as possible, extend your left arm down and behind your back,



Zipper Test

- **For the Performer:**

(Cont..), bend your elbow up across your back, and try to reach/cross your fingers over those of your right hand as if to pull a zipper or scratch between the shoulder blades.

c. To test the left shoulder, repeat procedures a and b with the left hand over the left shoulder.

- **For the Partner:**

a. Observe whether the fingers touched or overlapped each other, if not, measure the gap between the middle fingers of both hands.

b. Record the distance in centimeter.

Zipper Test

- For the Partner:

(Cont..) b. Record the distance in centimeter.

- **Scoring** – record zipper test to the nearest 0.1 centimeter.

Points	Standard
0	Did not touch fingertips
1	Just touched fingertips
2	Fingers overlapped by 1 - 2 cm.
3	Fingers overlapped by 3 - 4 cm.
4	Fingers overlapped by 5 - 7 cm.
5	Fingers overlapped by 8 cm. and more

Sit and Reach

Purpose – to test the flexibility of the lower back and extremities.

- **Equipment:** Tape measure or meter stick, card board or paper

Procedure

- **For the Performer:**
 - a. Sit on the floor with back, head and shoulders flat on the wall. Feet are 12 inches apart.
 - b. Interlock thumbs and position the tip of the fingers on the floor without bending the elbows. Reach up.

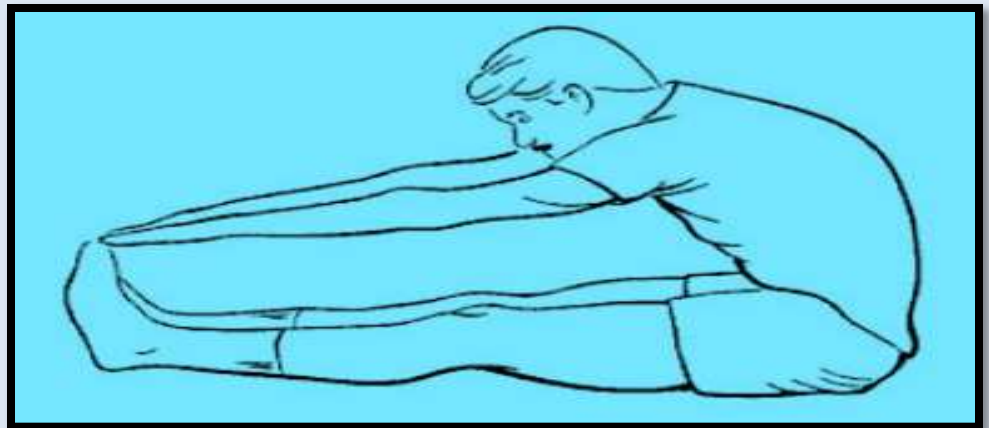
Sit and Reach

(cont..)

c. Place hands on top of the card board or paper where the tips of the middle fingers are at the top edge of the card board or paper. Start the test by pushing the card board or paper slowly and try to reach the farthest distance possible without bending the knees. Hold for 2 seconds.

d. Bouncing or jerking movement is not allowed.

e. Do it three times.



Sit and Reach

(cont..)

- **For the Partner:**

- a. As the performer assumes the (b) procedure, position the zero point of the tape measure at the tip of the middle fingers of the performer.

- b. See to it that the knees are not bent as the performer slides the farthest distance that he could.

- c. Record farthest distance reached in centimeters.

- **Scoring** – record the distance to the nearest 0.1 centimeters.

Cardiovascular endurance – is the ability of the heart, lungs and blood vessels to deliver oxygen to working muscles and tissues, as well as the ability of those muscles and tissues to utilize the oxygen. Endurance may also refer to the ability of the muscle to do repeated work without fatigue.

3 – Minute Step Test

- **Purpose** – to measure cardiovascular endurance.
 - **Equipment:** Stopwatch, drum or clapper
- Step: (height) Elementary – 8 inches
Secondary – 12 inches

Procedure

- **For the Performer:**
 - a. Position at least one foot away from the step or bench.
 - b. At the signal “Go”, step up and down the step/ bench for 3 minutes at a rate of 24 steps per minute. One step consists of 4 beats – that is, up with the left foot (ct. 1), up with the right foot (ct. 2), down with the left foot (ct. 3), down with the right foot (ct. 4).
 - c. Immediately after the exercise, locate your pulse and wait for the signal to start the counting. (Give 5 sec. to locate the pulse)
 - d. Don’t talk while taking the pulse beat.

(cont..)

e. Count the pulse beat for 10 sec. Multiply it by 6.

- **For the Partner:**

- a. As the student assumes the position in front of the step, signal, “Ready” and “Go”, start the stopwatch for 3-minute step test.

- b. After the test, allow performer to locate his/her pulse in within 5 seconds.

- c. Give the signal to count the pulse beat.

- d. Let the performer count his/her pulse beat for 10 seconds and multiply it by 6.

- **Scoring** – record the 60-second heart rate after the activity.

Strength – is the ability of the muscle to generate force against physical objects

Push-Up

Purpose – to measure strength of upper extremities.

Equipment: exercise mats or any clean mat.

Procedure

- **For the Performer:**

- a. Lie down on the mat; face down in standard push-up position; palms on the mat about shoulder width, fingers pointing forward, and legs straight, parallel, and slightly apart, with the toes supporting the feet.

(cont..) b. FOR BOYS: Straighten the arms, keeping the back and knees straight, then lower the arms until there is 90-degree angle at the elbows (upper arms are parallel to the floor.)

FOR GIRLS: With knees in contact with the floor, straightens the arms, keeping the back straight, then lowers the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).

c. Perform as many repetitions as possible, maintaining a cadence of 20 push-ups per minute. (2 seconds going down and 1 sec. going up). Note: 60 beats/min.

For the Partner:

a. As the performer assumes the position of push-up,

(cont..) start counting as the performer lowers his/her body until he/she reaches 90-degree angle at the elbow.

b. Make sure that the performer executes the push-ups in the correct form.

c. The test is terminated when the performer can no longer execute the push-ups in the correct form, if in pain, voluntarily stops, or cadence is broken.

Scoring – record the number of push-ups made.

Basic Plank

Purpose – to measure strength/stability of the core muscles.

Equipment: exercise mats or any clean mat.

Procedure

- **For the Performer:**
 - a. Assume a push-up position. Rest body on forearms with the palms and fingers flat on the floor. Elbows are aligned with the shoulders.
 - b. Legs are straight with ankles, knees and thighs touching together.

(cont..)

c. Support weight on forearms and toes; make sure that your back is flat. Head, neck and spine are in a straight line.

d. Keep abdominals engaged/contracted; do not let stomach drop or allow hips to rise.

- **For the Partner:**

a. Ensure the availability of a mat/smooth flooring or anything that can protect the forearms.

b. Give the signal “Start/Go” and start/press the time piece.

c. Make sure that the back of the head, neck, spine and ankles are in a straight line.

(cont..)

d. Stop the time when the performer can no longer hold the required position, or when the performer has held the position for at least 90 seconds. Holding the plank position beyond 90 seconds is considered unnecessary. (90 sec. – maximum time)

- **Scoring** – record the time in the nearest sec./min.



PART II. SKILLS- RELATED FITNESS

Speed – is the ability to perform a movement in one direction in the shortest period of time.

40-Meter Sprint

Purpose – to measure running speed.

Equipment: Stopwatch, running area (40 meter)

Procedure

* For the Performer:

- a. At the signal “Ready”, stand behind the take-off line, the tips of the shoes should not go beyond the line and assume a crouch position.
- b. At the signal “Get Set”, assume an un-crouch position (buttocks up) with both hands on the starting line.

(cont..) c. At the signal “GO”, run to the finish line as fast as you can.

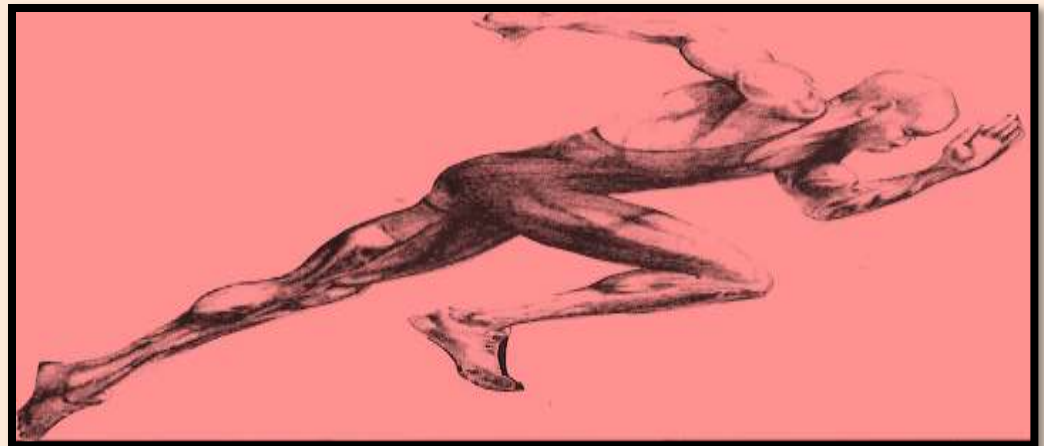
- **For the Partner:**

- a. Set the stopwatch to zero (0) point.

- b. At the signal “GO” start the watch and stop it as the performer crossed the finish line.

- c. Record time in the nearest 0.00.01 seconds.

- Scoring – record time in nearest minutes and seconds.



Power – is the ability of the muscle to transfer energy and release maximum force at a fast rate.

Standing Long Jump

Purpose - To measure the explosive strength and power of the leg muscles.

Equipment: Tape measure/meter stick

Procedure

- **For the Performer:**

- a. Stand behind the take-off line with the feet parallel to each other, the tips of the shoes should not go beyond the line.

Standing Long Jump

(cont..)

- b. Bend the knees and swing arms backward once, then swing arms forward as you jump landing on both feet. Try to jump as far as you can.
 - c. Do not control the momentum of the jump (continuously move forward).
 - d. Perform the test twice in succession.
- **For the Partner:**
 - a. Place zero (0) point of the tape measure at the take-off line.
 - b. After the jump, spot the mark where the back of

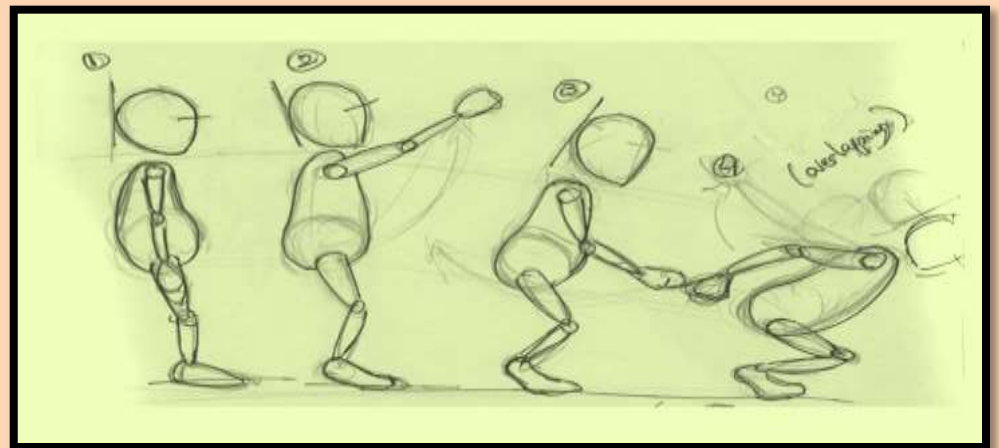
Standing Long Jump

(cont..)

of the heel of either feet of the performer has landed nearest to the take-off line.

c. Record the best distance in meters to the nearest 0.1 centimeters.

- **Scoring** – record the best distance in meters to the nearest 0.1 centimeters.



Agility – is the ability to move in different directions quickly using a combination of balance, coordination, speed, strength and endurance.

Hexagon Agility Test

Purpose – to measure the ability of the body to move in different directions quickly.

Equipment: Tape measure, stopwatch, chalk or masking tape (1 inch width)

Hexagon Size: length – 24 inches (60.5 cm)
each angle – 120 degrees

Option: (16 inches – Elem. / 20 inches – Sec.)

(cont..)

Hexagon Agility Test

Procedure

- For the Performer:
 - a. Stand with both feet together inside the hexagon facing the marked starting inside. (facing 1 direction)
 - b. At the signal “ Go” using the ball of the feet with arms bent in front, jump clockwise over the line, then back over the same line inside the hexagon. Continue the patten with all the sides of the hexagon.
 - c. Rest for one (1) minute.
 - d. Repeat the test counterclockwise.

(cont..)

- **For the Partner:**
 - a. Start the time at the signal go and stop once the performer reached the side before the side where he/she started.
 - b. Record the time of each revolution.
 - c. Restart the test if the performer jumps on the wrong side or steps on the line.
- **Scoring** – add the time of the two revolutions and divide by 2 to get the average. Record the time in the nearest minutes and seconds.

Reaction Time – the amount of time it takes to respond to a stimulus.

Stick Drop Test

Purpose – to measure the time to respond to a stimulus.

Equipment: 24 inch ruler or stick; arm chair or table and chair.

Procedure

- **For the Performer:**

- a. Sit on an armchair or chair next to the table so that the elbow and lower arm rest on the desk or table comfortably.

(cont..) Stick Drop Test

- b. Place the heel of the hand on the desk/table so that only the fingers and thumb extend beyond.
 - c. Catch the ruler/stick with the thumb and index finger without lifting the elbow from the desk/ table as the partner drops the stick. Hold the stick while the partner reads the measurement
 - d. Do this thrice (3x).
- **For the Partner–**
 - a. Hold the ruler or stick at the top, allowing it to dangle between the thumb and fingers of the performer.

(cont..) Stick Drop Test

b. Hold the ruler/stick so that the 24-inch mark index finger. No part of the hand of the performer should touch the ruler/stick.

c. Drop the ruler/stick without warning and let the performer catch it with his/her thumb and index finger.

- **Scoring** – record the middle of the three (3) scores (for example: if the scores are 21, 18, and 19, the middle score is 19)

Coordination – the ability to use the senses with the body parts to perform motor tasks smoothly and accurately.

Juggling

Purpose – to measure the coordination of the eye and hand.

Equipment – Sipa (washer w/ straw)/20 pcs. bundled rubber bands/any similar local materials (4-5 grams)

Procedure

- **For the Performer:**

- a. Hit the sipa/rubber band material alternately with the right and left palm upward. The height of the

(cont..)

Juggling

material being tossed should be at least above the head. Two trials only.

- **For the Partner:**
 - a. Count how many times the performer has hit the material with the right and left hand.
 - b. Stop the test if the material drops. Record the number of hits/trial.
- **Scoring** – record the number of hits the performer has done.

Balance – is the maintenance of equilibrium while stationary or while moving.

Stork Balance Stand Test

Purpose – to assess ones ability to maintain equilibrium.

Equipment: flat, non-slip surface, stopwatch

Procedure

- **For the Performer**
 - a. Remove the shoes and place hands on hips.
 - b. Position the right foot against the inside knee of the left foot.
 - c. Raise the left heel to balance on the ball of the foot.
 - d. Do the same procedure with the opposite foot.

(cont..)

Stork Balance Stand Test

- **For the Partner**
- a. Start the time as the heel of the performer is raised off the floor.
- b. Stop the time if any of the following occurs:
 - The hand(s) come off the hips
 - The supporting foot swivels or moves (hops) in any direction
 - The non-supporting foot loses contact with the knee.
 - The heel of the supporting foot touches the floor.
- **Scoring** – record the time taken on both feet in the nearest seconds.

Thank you...

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EPS in MAPEH

Division of Malaybalay City

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