

**CONCEPT2 INDOOR ROWING FOUNDATION
HOME STUDY COURSE**

Table of Contents

| | |
|---|----|
| Registration Form..... | 3 |
| Course Evaluation..... | 4 |
| Goals and Objectives..... | 5 |
| Course Prerequisites/ Outline and Study Guide..... | 6 |
| Practical Assessment: Requirements and Guide..... | 8 |
| Answer Sheet..... | 10 |
| Written Assessment..... | 12 |
| Submission Checklist | 20 |

This Home Study Course is intended to help the instructor become familiar with the information in the Indoor Rowing Foundation Instructor’s Manual. The course takes the form of a written test and a video submission.

ACE (American Council on Exercise) has evaluated the Home Study Course and has approved it for Continuing Education Credits. Successful participants in the course will receive the credits upon completion. We feel strongly about the benefits of the Home Study Course. It is a requirement for recognition as a Certified Indoor Rowing Instructor.

Home Study Course Registration Form

Participants who complete the Indoor Rowing Basics, the Indoor Rowing Basics Short Course, or the Full Day are required to complete the enclosed Home Study materials in order to receive an Indoor Rowing Foundation Instructor's Certification (IRFIC).

Complete this form and return it with the following:

1. Home Study Course answer sheet
2. Video Assessment
3. Home Study Course evaluation

Are you ACE certified? Yes No

Certification # _____

Add my name to a preferred trainers list Yes No

MAILING ADDRESS:

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____ COUNTRY _____

DAY PHONE () _____

EVENING PHONE () _____

EMAIL _____

Please return top half of form

HOME STUDY REQUIREMENTS:

- Complete the Indoor Rowing Basics, the Indoor Rowing Basics Short Course, or the Full Day.
- Read 1½–2 hours worth of materials in the Instructor's Manual.
- Complete and return the Home Study written test.
- Prepare and return a 9–10 minute video of your rowing technique while describing this technique to your class.
- Complete the Home Study evaluation form.

Upon successful completion of the Home Study requirements, you will receive the following:

- Certificate of Participation for Home Study.
- Return of your technique video with a critique.
- Notification to ACE of Continuing Education Credits earned.
- With your approval, your name will be added to a preferred trainers list to be used when inquiries are received from individuals or health club owners regarding qualified Indoor Rowing instructors. (Be sure to check the box above if you want your name to appear on this list.)

Home Study Course Evaluation

Please rate the following on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. Return this evaluation with your Home Study Course application, written test answer sheet, and video tape assessment. Thank You!

GOALS AND OBJECTIVES

| | | | | | |
|-------------------|---|---|---|---|---|
| Clearly stated | 1 | 2 | 3 | 4 | 5 |
| Easily attainable | 1 | 2 | 3 | 4 | 5 |

PROGRAM OUTLINE/STUDY GUIDE

| | | | | | |
|-------------------|---|---|---|---|---|
| Clearly stated | 1 | 2 | 3 | 4 | 5 |
| Easily attainable | 1 | 2 | 3 | 4 | 5 |

PRACTICAL ASSESSMENT

| | | | | | |
|-------------------------------|---|---|---|---|---|
| Clearly and easily understood | 1 | 2 | 3 | 4 | 5 |
| Reasonable expectations | 1 | 2 | 3 | 4 | 5 |

WRITTEN ASSESSMENT

| | | | | | |
|---|---|---|---|---|---|
| Level of difficulty appropriate for fitness professionals | 1 | 2 | 3 | 4 | 5 |
| Length of test | 1 | 2 | 3 | 4 | 5 |
| Use of manual references to aide in selecting answers | 1 | 2 | 3 | 4 | 5 |
| Comprehensiveness | 1 | 2 | 3 | 4 | 5 |
| Practicality | 1 | 2 | 3 | 4 | 5 |
| Answer Sheet—easy to use | 1 | 2 | 3 | 4 | 5 |

SUBMISSION CHECKLIST

| | | | | | |
|-------------|---|---|---|---|---|
| Easy to use | 1 | 2 | 3 | 4 | 5 |
| Helpful | 1 | 2 | 3 | 4 | 5 |

COMMENTS _____

OVERALL HOME STUDY COURSE

What did you like most about the program? _____

What did you like least about the program? _____

Any recommendations or general comments? _____



Home Study Course Goals and Objectives

OVERALL GOALS:

The Home Study Course will serve as a compliment to the Full Day workshop; therefore bringing the successful participant up to the level of credentialed Indoor Rowing Instructor.

The Home Study Course will guide the instructor through the written information provided in the Instructor's Manual and Indoor Rower User Manual.

HOME STUDY COURSE OBJECTIVES:

The student will identify and explain the four components of proper rowing technique.

The student will identify the biomechanics of the rowing stroke in regard to the major muscles and joint actions involved in each segment.

The student will be able to identify and correctly cue the four common rowing errors.

The student will be able to recall the results of the Gilligan and Hagerman studies in regard to the physiologic benefits of rowing.

The student will be able to make rowing recommendations for an average healthy adult.

The student will understand and be able to define at least seven common rowing terms.

The student will be able to read and interpret a pace chart.

The student will be able to apply theoretical rowing knowledge to the practical setting in regard to correct damper setting and recommended stroke rate.

The student will be able to explain the benefits of rowing in synchrony.

The student will understand the self-directed programs, including the Million Meter Club and the Online Ranking.

The student will be able to read and interpret rowing workout plans.

The student will be able to select appropriate workouts based on individual goals,

The student will be able to demonstrate how to engage and disengage the monorail.

The student will be able to demonstrate how to row in slow motion; identifying muscles in the arms and back, the portions of the slide, and the complete rowing stroke.

The student will be able to identify the individual components of the rowing stroke with instructional cueing.

The student will be able to demonstrate at least two cues for two common technique errors.

The student will be able to demonstrate how to correctly set up the Performance Monitor for a workpiece.

The student will be able to demonstrate a brief row, showing different paces.

The student will be able to demonstrate correct post-rowing etiquette.

Home Study Course Prerequisites

This Home Study Course provides the compliment to the Indoor Rowing Full Day Workshop and guarantees an Indoor Rowing Instructor's Certificate for those students who pass both the written and practical assessments. The course outline and required work assumes that you have attended the Indoor Rowing Full Day Workshop.

To have a successful experience with the Home Study Course, please complete the following prerequisites before embarking on the Home Study.

- Review the outline and any associated reading from the Full Day Workshop.
- Review proper rowing technique at concept2.com/technique.

Home Study Outline and Study Guide

STEP 1. REQUIRED READING (approximate time: 2 hours)

- Read pages 6–36 in the Model D and E Indoor Rower User Manual.
- Read Chapters 1 through 4 in the Indoor Rowing Foundation Instructor's Manual.

STEP 2. PRACTICAL SKILLS APPLICATION (approximate time, 1.25 hours, divided into five 15-minute segments)

A. Using the rowing technique video at concept2.com/technique as a model, perfect your rowing technique while instructively cueing for proper execution as well as labeling the components of the rowing stroke. (Recommended SPM: 24)

B. Select one of the fundamental workout plans, pages 37–47, to use for an abbreviated 15-minute workout. Briefly go through the goal of the workout, pre-workout setup, warmup, workout setup, body of workout, cooldown, and post-workout etiquette. Practice verbally instructing throughout this piece.

NOTE: If you are a new rower, you may want to select workout #F1 or #F2 as opposed to one of the later workouts in the series.

C. Select one of the workout plans on pages 48–60 to use for an abbreviated 15-minute workout. Briefly go through the goal of the workout, pre-workout setup, warmup, workout setup, body of workout, cooldown, and post-workout etiquette. Practice verbally instructing throughout this piece.

NOTE: If you are a new rower, you may want to select one of the steady-state or less intense lesson plans as opposed to one of the intervals.

- D. Practice engaging and disengaging the monorail as well as teaching proper machine setup and post-rowing etiquette.

- E. Set up the machine for an interval workout with 1 minute of work followed by a rest interval. Row for 10 intervals, practicing rowing at a higher intensity while maintaining proper form and verbal instructional cueing.

STEP 3. WRITTEN ASSESSMENT (approximate time: 1 hour)

- Using the answer sheet provided, complete the 49 question written assessment. This is an “open book” test, so you may refer to any of the written material provided.
- A score of 90 must be achieved to pass the written assessment.

STEP 4. PRACTICAL ASSESSMENT (approximate time: 135 minutes or 2.25 hours—120 minutes to prepare, practice, and set up; 15 minutes to film)

- Using the Video Submission Guide on page 8, submit a video of your teaching for competency review.
- A score of 90 must be achieved in order to pass the practical assessment.

NOTE: Individuals not achieving competency (90 points) in either segment of the assessment will be asked to correct and resubmit their assessments in order to successfully complete the Home Study Course.

Practical Assessment

VIDEO SUBMISSION REQUIREMENTS AND GUIDE

Use the following protocol when submitting your videotaped component of the Indoor Rowing Foundation Home Study Course. The total possible point value will be distributed among the elements required in each category. For example, in the Introduction and Preparing the Indoor Rower segment, the 10 possible points will be divided as follows: 2 points for personal introduction, 3 points for engaging and disengaging the monorail and front end, and 5 points for correctly placing the monitor, damper setting, handle, and flexfoot in their appropriate locations.

Positioning: Shoot the video from the side (mid-monorail position)

Length: Approximately 9–10 minutes total

| VIDEO SEGMENTS: | POSSIBLE POINTS |
|--|-----------------|
| Time 0:00–1:00 | |
| INTRODUCTION AND PREPARING THE INDOOR ROWER | 10 |
| Introduce yourself. | |
| Demonstrate and explain: | |
| • Disengage/engage monorail and front end | |
| • Placement of Performance Monitor, damper setting, handle on the handle hook and flexfoot | |
| Time 1:00–2:30 | |
| SLOW MOTION ROWING | 10 |
| Demonstrate and explain: | |
| • Arms and back only rowing (no slide) | |
| • Portions of a slide (1/4 slide, 1/2 slide, 3/4 slide) | |
| • Complete rowing stroke | |
| Time 2:30–4:00 | |
| VERBALLY IDENTIFY PARTS OF THE STROKE | 10 |
| Demonstrate and explain each individual segment: | |
| • Finish | |
| • Recovery | |
| • Catch | |
| • Drive | |

| VIDEO SEGMENTS: | POSSIBLE POINTS |
|---|-----------------|
| <p>Time 4:00–5:30</p> <p>IDENTIFY KEY CUEING COMMENTS FOR EACH POSITION LISTED ON PREVIOUS PAGE USING INSTRUCTIONAL LANGUAGE</p> <p>While rowing continuously for 1:30, give instructional commentary for each part of the stroke: finish, recovery, catch, drive.</p> <p>Scripted example:</p> <p>While passing through the recovery stage say something like ...<i>Make sure your hands pass over your knees before flexing/bending your knees.</i></p> | 30 |
| <p>Time 5:30–6:45</p> <p>INSTRUCTIONAL TECHNIQUE ERROR AND CUEING CORRECTIONS</p> <p>Your client/class is displaying the following two errors. Give instructional cueing corrections for each.</p> <ul style="list-style-type: none"> • Lifting handle over flexed knees on recovery • Bending arms before legs are moving (at the start of the drive) <p>Scripted example:</p> <p><i>Make sure your hands pass over your knees before flexing/bending your knees. This way, the handle won't have to be lifted over bent knees.</i></p> | 20 |
| <p>Time 6:45–8:45</p> <p>MONITOR SETUP AND ROWING</p> <ul style="list-style-type: none"> • Set up your monitor for 1:00 of work and 1:00 of rest. • Demonstrate proper rowing technique during 1:00 of intense rowing work. Demonstrate proper rowing technique during 1:00 of light paddling (rest). • Verbally explain how you are setting up your monitor. • Verbally explain how you will moderate the intensity (pace) of your rowing from intense to an easy paddle. | 15 |
| <p>Time 8:45–9:45</p> <p>POST-ROWING ETIQUETTE</p> <p>Demonstrate and explain:</p> <ul style="list-style-type: none"> • Handle return • Damper return to 1 • Monorail wipe down | 5 |
| TOTAL POSSIBLE POINTS | 100 |

Home Study Course Answer Sheet

NAME _____

Use a pencil to darken the circle under your answer choice. If your answer is True, you will choose A. If your answer is False, you will choose B. Each question is worth 2 points, for a possible total of 100 points.

| | A | B | C | D | E | F | G |
|-----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | True | False | | | | | |
| 1. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 2. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 3. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 4. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 5. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 6. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 7. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 8. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 9. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 10. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 11. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 12. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 13. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 14. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 15. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 16. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 17. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 18. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 19. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 20. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 21. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 22. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



NAME _____

| | A True | B False | C | D | E | F | G |
|--|-----------|------------|---|---|---|---|---|
|--|-----------|------------|---|---|---|---|---|

- | | | | | | | | |
|-----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 26. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 27. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 30. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 31. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 32. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 33. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 34. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 35. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 36. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 37. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 38. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 39. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 40. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 41. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 42. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 43. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 44. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |
| 45. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | |
| 46. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | |
| 47. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | |
| 48. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | |
| 49. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | |



FOR OFFICE USE ONLY
SCORE _____

Home Study Written Assessment

- All but one of the following are components of proper rowing technique:
 - Lean
 - Drive
 - Recovery
 - Catch
- The segment of the rowing stroke in which you are pressing down with your legs while pulling with your back and arms is the _____.
 - Finish
 - Drive
 - Catch
 - Recovery
- In the _____, you flex your torso as your arms extend toward the flywheel, passing over the knees, before the knees flex to slide the seat forward.
 - Catch
 - Drive
 - Recovery
 - Finish
- Your upper body leans back slightly in the _____, as your legs are straight and the handle is pulled toward the abdomen.
 - Catch
 - Drive
 - Recovery
 - Finish
- In the catch position, the arms are _____ and the seat is _____.
 - Extended, Back
 - Extended, Forward
 - Flexed, Back
 - Flexed, Forward

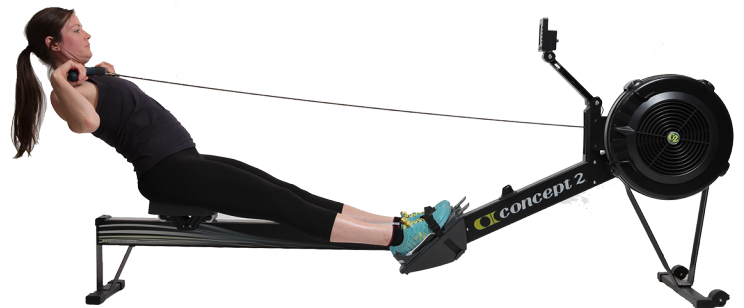
TRUE (T) OR FALSE (F)

- _____ 6. The erector spinae muscles are relaxed during the catch.
- _____ 7. In the catch, the ankles are plantar flexed by the tibialis anterior.
- _____ 8. In the leg emphasis of the drive, the scapular is stabilized by the serratus anterior and the trapezius.
- _____ 9. In the arm pull-through segment of the drive, the upper arm is internally rotated.
- _____ 10. In the finish, the hips are in full extension, while the back extensors are contracting.
- _____ 11. In the recovery phase, the ankle, hip, and knee undergo flexion.

12. Which of the following best describes the technique error during the drive present in the photo at right?
- A. Opening back too early
 - B. Legs are driving without the back opening (shooting the tail)
 - C. Bending knees too soon
 - D. None of the above



13. Which of the following comments could be used to correct the error depicted during the finish in this photo?
- A. Pull the handle higher to engage more of the trapezius muscle.
 - B. Keep the knees flexed at all times.
 - C. Never allow completion extension the spine.
 - D. Pull the handle into the abdomen and have less layback at the finish.



14. Which of the following best describes the technique error depicted during the recovery in this photo at right?
- A. Opening back too late
 - B. Opening back too early
 - C. Bending the knees too soon
 - D. None of the above



15. Which of the following comments could be used to correct the error depicted at the catch in the photo at right?
- A. Keep the seat about 6–8 inches from the heels, the shins nearly vertical.
 - B. Try to reach as far forward as your body allows, the shins significantly past vertical.
 - C. Start the drive by extending the legs, but don't move the handle.
 - D. Pull the handle as quickly and as forcefully as possible.



16. The Gilligan study on physiologic response to rowing versus cycling indicated that _____.
- A. There is no difference between rowing ergometry and cycling ergometry.
 - B. Only oxygen cost is greater during rowing ergometry.
 - C. Only caloric expenditure is greater during rowing ergometry.
 - D. Oxygen uptake and caloric expenditure are greater during rowing ergometry exercise.
17. Energy cost comparisons in the Hagerman study showed that _____.
- A. Energy costs were significantly higher for both men and women for rowing ergometry compared to identical power outputs during cycling ergometry.
 - B. Energy costs were no different between rowing ergometry compared with identical power outputs during cycling ergometry.
 - C. There was a slight decline in energy costs for cycling ergometry and rowing ergometry.
 - D. All of the above.
18. Given the results of the Hagerman study with elderly individuals, what suggestion would you have for an apparently healthy 60-year-old interested in indoor rowing?
- A. Only individuals under 60 years of age should be using an indoor rower.
 - B. Rowing does not fall into the range of training intensities recommended by the American Heart Association.
 - C. Rowing ergometry can be considered a suitable alternative exercise for the elderly. This age group appears to benefit from the range of training intensities recommended by ACSM and AHA.
 - D. Rowing ergometry is only for the young and fit exerciser.
19. Which researcher(s) suggests that indoor rowing exercise has a definite place in the spectrum of prescribed exercises?
- A. Thomas Mazzone, M.D.
 - B. Gilligan, Bezoni, and Webster
 - C. Lakomy and Lakomy
 - D. Hagerman and Mansfield
20. One of the conclusions of the Lakomy and Lakomy study was as follows:
- A. The greatest difference between submax speed and $\dot{V}O_2$ max relationship showed that rowers were more efficient than non-rowers.
 - B. Rowing on the indoor rower cannot be used for submaximal exercise testing.
 - C. Rowing elicits too high a cardiac response to collect submaximal heart rate data.
 - D. Using the formula $220 - \text{heart rate} \times \text{age}$ is a good indicator of maximal heart rate.
21. Which researcher reported in 1987, in *Research Quarterly Exercise Sports*, a comparison of exercise performance on rowing and cycle ergometers.
- A. Gilligan et al.
 - B. Hagerman et al.
 - C. Zeni et al.
 - D. Mahler et al.

MATCH THE DEFINITION TO THE CORRECT ROWING TERM:

- a. Layback b. Piece c. Meters
d. Pace e. SPM f. Split g. Monorail

_____ 22. The term used to describe a work segment on the indoor rower.

_____ 23. The part of the indoor rower upon which the seat slides.

_____ 24. The number of strokes (drives) per minute.

_____ 25. The work output measured at set distance or time segments during a work piece.

_____ 26. The measure of effort in units of time per 500 meters.

_____ 27. The position of the upper body at the finish of the stroke.

_____ 28. The units used to measure how "far" you have rowed.

Concept2 Indoor Rower Pace Chart

Use this chart to predict your final time or distance for the workouts shown.

| Average pace per | Your time will be: | | | | | Your distance will be: | |
|---------------------|--------------------|-------|-------|-------|-------|------------------------|---------|
| | 500m | 1000m | 2000m | 5000m | 6000m | 10,000m | 30 min. |
| 1:40 | 3:20 | 6:40 | 16:40 | 20:00 | 33:20 | 9000 | 18,000 |
| 1:42 | 3:24 | 6:48 | 17:00 | 20:24 | 34:00 | 8824 | 17,647 |
| 1:44 | 3:28 | 6:56 | 17:20 | 20:48 | 34:40 | 8654 | 17,308 |
| 1:46 | 3:32 | 7:04 | 17:40 | 21:12 | 35:20 | 8491 | 16,981 |
| 1:48 | 3:36 | 7:12 | 18:00 | 21:36 | 36:00 | 8333 | 16,667 |
| 1:50 | 3:40 | 7:20 | 18:20 | 22:00 | 36:40 | 8182 | 16,364 |
| 1:52 | 3:44 | 7:28 | 18:40 | 22:24 | 37:20 | 8036 | 16,071 |
| 1:54 | 3:48 | 7:36 | 19:00 | 22:48 | 38:00 | 7895 | 15,789 |
| 1:56 | 3:52 | 7:44 | 19:20 | 23:12 | 38:40 | 7759 | 15,517 |
| 1:58 | 3:56 | 7:52 | 19:40 | 23:36 | 39:20 | 7627 | 15,254 |
| 2:00 | 4:00 | 8:00 | 20:00 | 24:00 | 40:00 | 7500 | 15,000 |
| 2:02 | 4:04 | 8:08 | 20:20 | 24:24 | 40:40 | 7377 | 14,754 |
| 2:04 | 4:08 | 8:16 | 20:40 | 24:48 | 41:20 | 7258 | 14,516 |
| 2:06 | 4:12 | 8:24 | 21:00 | 25:12 | 42:00 | 7143 | 14,286 |
| 2:08 | 4:16 | 8:32 | 21:20 | 25:36 | 42:40 | 7031 | 14,063 |
| 2:10 | 4:20 | 8:40 | 21:40 | 26:00 | 43:20 | 6923 | 13,846 |
| 2:12 | 4:24 | 8:48 | 22:00 | 26:24 | 44:00 | 6818 | 13,636 |
| 2:14 | 4:28 | 8:56 | 22:20 | 26:48 | 44:40 | 6716 | 13,433 |
| 2:16 | 4:32 | 9:04 | 22:40 | 27:12 | 45:20 | 6618 | 13,235 |
| 2:18 | 4:36 | 9:12 | 23:00 | 27:36 | 46:00 | 6522 | 13,043 |
| 2:20 | 4:40 | 9:20 | 23:20 | 28:00 | 46:40 | 6429 | 12,857 |
| 2:22 | 4:44 | 9:28 | 23:40 | 28:24 | 47:20 | 6338 | 12,676 |
| 2:24 | 4:48 | 9:36 | 24:00 | 28:48 | 48:00 | 6250 | 12,500 |
| 2:26 | 4:52 | 9:44 | 24:20 | 29:12 | 48:40 | 6164 | 12,329 |
| 2:28 | 4:56 | 9:52 | 24:40 | 29:36 | 49:20 | 6081 | 12,162 |
| 2:30 | 5:00 | 10:00 | 25:00 | 30:00 | 50:00 | 6000 | 12,000 |
| 2:32 | 5:04 | 10:08 | 25:20 | 30:24 | 50:40 | 5921 | 11,842 |
| 2:34 | 5:08 | 10:16 | 25:40 | 30:48 | 51:20 | 5844 | 11,688 |
| 2:36 | 5:12 | 10:24 | 26:00 | 31:12 | 52:00 | 5769 | 11,538 |
| 2:38 | 5:16 | 10:32 | 26:20 | 31:36 | 52:40 | 5696 | 11,392 |
| 2:40 | 5:20 | 10:40 | 26:40 | 32:00 | 53:20 | 5625 | 11,250 |
| 2:42 | 5:24 | 10:48 | 27:00 | 32:24 | 54:00 | 5556 | 11,111 |
| 2:44 | 5:28 | 10:56 | 27:20 | 32:48 | 54:40 | 5488 | 10,976 |
| 2:46 | 5:32 | 11:04 | 27:40 | 33:12 | 55:20 | 5422 | 10,843 |
| 2:48 | 5:36 | 11:12 | 28:00 | 33:36 | 56:00 | 5357 | 10,714 |
| 2:50 | 5:40 | 11:20 | 28:20 | 34:00 | 56:40 | 5294 | 10,588 |
| 2:52 | 5:44 | 11:28 | 28:40 | 34:24 | 57:20 | 5233 | 10,465 |
| 2:54 | 5:48 | 11:36 | 29:00 | 34:48 | 58:00 | 5172 | 10,345 |
| 2:56 | 5:52 | 11:44 | 29:20 | 35:12 | 58:40 | 5114 | 10,227 |
| 2:58 | 5:56 | 11:52 | 29:40 | 35:36 | 59:20 | 5056 | 10,112 |
| 3:00 | 6:00 | 12:00 | 30:00 | 36:00 | 60:00 | 5000 | 10,000 |

Use this picture of the performance monitor and the pace chart on the previous page to answer the questions 29–33. Answers can be found in the Concept2 Indoor Rower User Manual.



PM5

29. The performance monitor above is displaying the amount of energy expended in terms of _____.
 - A. Watts
 - B. Pace/500 Meter
 - C. Calories
 - D. 500 Mile Time

30. This individual is rowing at _____ strokes per minute.
 - A. 294
 - B. 123
 - C. 27
 - D. 1:46

31. Using the pace chart on the previous page and the performance monitor above, this individual can predict that a 2000-meter row would take _____.
 - A. About 8:12
 - B. About 8:00
 - C. About 10:00
 - D. 9:14

32. If an individual had an average 500 meter pace of 2:12, how long would it take him to row 10,000 meters?
 - A. 11:00
 - B. 44:00
 - C. 20:00
 - D. 8:48

33. One of your class participants consistently rows a 2:20/500 meter pace. She would like to improve her pace so she could row 5,000 meters in 20 minutes. What /500 meter pace time should she strive for?
 - A. 1:54
 - B. 2:00
 - C. 2:04
 - D. 2:18

34. A new client approaches you and wants to know where he should set the damper setting. He has never rowed before. What is your recommendation?
 - A. 1
 - B. 3
 - C. 5
 - D. 7

35. What should the average stroke rate (SPM) be for most novice (new) rowers?
 - A. 15–20
 - B. 20–24
 - C. 20–28
 - D. 28–32

36. Of the factors listed below, which one most directly effects the intensity of the workout?
- A. How hard you pull on the handle
 - B. The damper setting
 - C. The number of strokes per minute
 - D. Rowing for a long duration
37. If a client wants to improve cardiovascular fitness, which setting would be most suitable for long-duration rowing?
- A. 1
 - B. 2-4
 - C. 5-7
 - D. 8-10
38. The indoor rowing coach might use synchrony to_____.
- A. Organize all the participants to row together
 - B. Control the class, which has varying abilities
 - C. Provide the class members the feeling of rowing in unison, similar to that in a shell
 - D. All of the above
39. The personal trainer can use synchrony with a client to _____.
- A. Reinforce technical pointers
 - B. Allow the trainer to control the workout in terms of strokes per minute and workout design
 - C. Demonstrate changes in speed of pull
 - D. All of the above
40. Which categories must a client report to have his or her score recorded in the Online Ranking?
- A. Age
 - B. Weight
 - C. Gender
 - D. All of the above
41. Which events are ranked in the Online Ranking?
- A. 2000-meter row, 30 minute and 60 minute
 - B. Million meter, 5000 meter, and 10,000 meter
 - C. Only the 2000-meter row
 - D. Only the Million Meter row
42. How much time can your client take to achieve a million meters?
- A. 3 months
 - B. 6 months
 - C. As long as is needed
 - D. None of the above

Using the workout plan on page 50 of the Instructor's Manual, answer the following question:

43. Which statement best describes this workout.
- A. Workout Plan 2 is a steady-state piece that doesn't have much variance in intensity.
 - B. Workout Plan 2 describes a single-piece segmented workout.
 - C. Workout Plan 2 is a long, intense interval workout.
 - D. Workout Plan 2 is a short but intense interval workout.
44. Which of the following areas benefit from a proper rowing workout?
- A. Cardiovascular
 - B. Muscular
 - C. Skeletal
 - D. All of the above

USE THE FOLLOWING CHOICES TO PROPERLY FILL IN THE BLANKS FOR QUESTIONS 45–49.

- A. Short work interval with a short rest
 - B. 30–40 minutes steady-state
 - C. A variety of training stimuli, resulting in a well-rounded training program
 - D. 2000 meters racing
 - E. Fitness of participants.
45. When designing a training schedule, which elements are critical to consider? _____
46. A program of interval training best prepares you for _____.
47. A workout can be divided into _____ in order to maintain good intensity for long periods of time.
48. Selecting different workouts each week for the class as well as "between class workouts" provides _____.
49. Which workout would be a good choice if you wanted to work on technique and synchrony of rowing? _____

Home Study Course Submission Checklist

Before returning materials to Concept2, use this checklist to make sure you have included all assessment and registration materials. Your assessment results and official credential will be sent to you within 4–5 weeks.

- Completed Home Study Course Application
- Home Study Course Answer Sheet (Written Assessment)
Please make sure your name is clearly printed.
- Videotape Assessment (Practical Assessment)
Please make sure your name is clearly printed on a label affixed to the videotape.
- Home Study Course Evaluation - see page 4.

Submit all written materials and the video to your course instructor. If you have questions or comments about the Instructor Training or course materials contact:

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